SEQUENCE LISTING

<110> Barbas, Carlos F., III
Kadan, Michael
Beerli, Roger

<120> LIGAND ACTIVATED TRANSCRIPTIONAL REGULATOR PROTEINS

<130> 22908-1227B

<140> Unknown
<141> 2000-06-02

<150> 09/433,042
<151> 1999-10-25

<160> 92

<170> PatentIn Ver. 2.0

<210> 1
<211> 6828
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Construct
2C7LBDAS

<400> 1
```
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttagat ctatggccca ggcggccctc gagccctatg cttgccctgt 960
cgagtcctgc gatcgccgct tttctaagtc ggctgatctg aagcgccata tccgcatcca 1020
cacaggccag aagcctttcc agtgtcgaat atgcatgcgt aacttcagtc gtagtgacca 1080
ccttaccacc cacatccgca cccacacagg cgagaagcct tttgcctgtg acatttgtgg 1140
gaggaagttt gccaggagtg atgaacgcaa gaggcatacc aaaatccata ccggtgagaa 1200
gccctatgct tgccctgtcg agtcctgcga tcgccgcttt tctaagtcgg ctgatctgaa 1260
gcgccatatc cgcatccaca caggccagaa gcccttccag tgtcgaatat gcatgcgtaa 1320
cttcagtcgt agtgaccacc ttaccaccca catccgcacc cacacaggcg agaagccttt 1380
tgcctgtgac atttgtggga ggaagtttgc caggagtgat gaacgcaaga ggcataccaa 1440
aatccattta agacagaggg actctagaac tagttctgct ggagacatga gagctgccaa 1500
cctttggcca agcccgctca tgatcaaacg ctctaagaag aacagcctgg ccttgtccct 1560
gacggccgac cagatggtca gtgccttgtt ggatgctgag ccccccatac tctattccga 1620
gtatgatcct accagacccct tcagtgaagc ttcgatgatg ggcttactga ccaacctggc 1680
agacagggag ctggttcaca tgatcaactg ggcgaagagg gtgccaggct ttgtggattt 1740
gaccctccat gatcaggtcc accttctaga atgtgcctgg ctagagatcc tgatgattgg 1800
tctcgtctgg cgctccatgg agcacccagg gaagctactg tttgctccta acttgctctt 1860
ggacaggaac cagggaaaat gtgtagaggg catggtggag atcttcgaca tgctgctggc 1920
```

tacatcatct cggttccgca tgatgaatct gcagggagag gagtttgtgt gcctcaaatc 1980
tattattttg cttaattctg gagtgtacac atttctgtcc agcaccctga agtctctgga 2040
agagaaggac catatccacc gagtcctgga caagatcaca gacactttga tccacctgat 2100
ggccaaggca ggcctgaccc tgcagcagca gcaccagcgg ctggcccagc tcctcctcat 2160
cctctcccac atcaggcaca tgagtaacaa aggcatggag catctgtaca gcatgaagtg 2220
caagaacgtg gtgcccctct atgacctgct gctggagatg ctggacgccc accgcctaca 2280
tgcgcccact agccgtacgc cggccgacgc cctggacgac ttcgacctgg acatgctgcc 2340
ggccgacgcc ctggacgact tcgacctgga catgctgccg gccgacgccc tggacgactt 2400
cgacctggac atgctgccgg ggtaactaag taagcggccg ctcgagtcta gagggcccgt 2460
ttaaacccgc tgatcagcct cgactgtgcc ttctagttgc cagccatctg ttgtttgccc 2520
ctcccccgtg ccttccttga ccctggaagg tgccactccc actgtccttt cctaataaaa 2580
tgaggaaatt gcatcgcatt gtctgagtag gtgtcattct attctggggg gtggggtggg 2640
gcaggacagc aagggggagg attgggaaga caatagcagg catgctgggg atgcggtggg 2700
ctctatggct tctgaggcgg aaagaaccag ctggggctct agggggtatc cccacgcgcc 2760
ctgtagcggc gcattaagcg cggcgggtgt ggtggttacg cgcagcgtga ccgctacact 2820
tgccagcgcc ctagcgcccg ctcctttcgc tttcttccct tcctttctcg ccacgttcgc 2880
cggctttccc cgtcaagctc taaatcgggg catcccttta gggttccgat ttagtgcttt 2940
acggcacctc gaccccaaaa aacttgatta gggtgatggt tcacgtagtg ggccatcgcc 3000
ctgatagacg gtttttcgcc ctttgacgtt ggagtccacg ttctttaata gtggactctt 3060
gttccaaact ggaacaacac tcaaccctat ctcggtctat tcttttgatt tataagggat 3120
tttggggatt tcggcctatt ggttaaaaaa tgagctgatt taacaaaaat ttaacgcgaa 3180
ttaattctgt ggaatgtgtg tcagttaggg tgtggaaagt ccccaggctc cccaggcagg 3240
cagaagtatg caaagcatgc atctcaatta gtcagcaacc aggtgtggaa agtccccagg 3300
ctccccagca ggcagaagta tgcaaagcat gcatctcaat tagtcagcaa ccatagtccc 3360
gcccctaact ccgcccatcc cgcccctaac tccgcccagt tccgcccatt ctccgcccca 3420
tggctgacta atttttttta tttatgcaga ggccgaggcc gcctctgcct ctgagctatt 3480
ccagaagtag tgaggaggct tttttggagg cctaggcttt tgcaaaaagc tcccgggagc 3540
ttgtatatcc attttcggat ctgatcaaga gacaggatga ggatcgtttc gcatgattga 3600
acaagatgga ttgcacgcag gttctccggc cgcttgggtg gagaggctat tcggctatga 3660
ctgggcacaa cagacaatcg gctgctctga tgccgccgtg ttccggctgt cagcgcaggg 3720
gcgcccggtt ctttttgtca agaccgacct gtccggtgcc ctgaatgaac tgcaggacga 3780
ggcagcgcgg ctatcgtggc tggccacgac gggcgttcct tgcgcagctg tgctcgacgt 3840
tgtcactgaa gcgggaaggg actggctgct attgggcgaa gtgccggggc aggatctcct 3900
gtcatctcac cttgctcctg ccgagaaagt atccatcatg gctgatgcaa tgcggcggct 3960
gcatacgctt gatccggcta cctgcccatt cgaccaccaa gcgaaacatc gcatcgagcg 4020
agcacgtact cggatggaag ccggtcttgt cgatcaggat gatctggacg aagagcatca 4080
ggggctcgcg ccagccgaac tgttcgccag gctcaaggcg cgcatgcccg acggcgagga 4140
tctcgtcgtg acccatggcg atgcctgctt gccgaatatc atggtggaaa atggccgctt 4200
ttctggattc atcgactgtg gccggctggg tgtggcggac cgctatcagg acatagcgtt 4260
ggctacccgt gatattgctg aagagcttgg cggcgaatgg gctgaccgct tcctcgtgct 4320
ttacggtatc gccgctcccg attcgcagcg catcgccttc tatcgccttc ttgacgagtt 4380
cttctgagcg ggactctggg gttcgaaatg accgaccaag cgacgcccaa cctgccatca 4440
cgagatttcg attccaccgc cgccttctat gaaaggttgg gcttcggaat cgttttccgg 4500
gacgccggct ggatgatcct ccagcgcggg gatctcatgc tggagttctt cgcccacccc 4560
aacttgttta ttgcagctta taatggttac aaataaagca atagcatcac aaatttcaca 4620
aataaagcat ttttttcact gcattctagt tgtggtttgt ccaaactcat caatgtatct 4680
tatcatgtct gtataccgtc gacctctagc tagagcttgg cgtaatcatg gtcatagctg 4740
tttcctgtgt gaaattgtta tccgctcaca attccacaca acatacgagc cggaagcata 4800
aagtgtaaag cctggggtgc ctaatgagtg agctaactca cattaattgc gttgcgctca 4860
ctgcccgctt tccagtcggg aaacctgtcg tgccagctgc attaatgaat cggccaacgc 4920
gcggggagag gcggtttgcg gcgagcggta tcagctcact caaaggcggt aatacggtta 4980
tccacagaat caggggataa cgcaggaaag aacatgtgag caaaaggcca gcaaaaggcc 5040
aggaaccgta aaaaggccgc gttgctggcg tttttccata ggctccgccc ccctgacgag 5100
catcacaaaa atcgacgctc aagtcagagg tggcgaaacc cgacaggact ataaagatac 5160
caggcgtttc cccctggaag ctccctcgtg cgctctcctg ttccgaccct gccgcttacc 5220
ggatacctgt ccgcctttct cccttcggga agcgtggcgc tttctcaatg ctcacgctgt 5280
aggtatctca gttcggtgta ggtcgttcgc tccaagctgg gctgtgtgca cgaacccccc 5340
gttcagcccg accgctgcgc cttatccggt aactatcgtc ttgagtccaa cccggtaaga 5400
cacgacttat cgccactggc agcagccact ggtaacagga ttagcagagc gaggtatgta 5460
ggcggtgcta cagagttctt gaagtggtgg cctaactacg gctacactag aaggacagta 5520
tttggtatct gcgctctgct gaagccagtt accttcggaa aaagagttgg tagctcttga 5580
tccggcaaac aaaccaccgc tggtagcggt ggtttttttg tttgcaagca gcagattacg 5640
cgcagaaaaa aaggatctca agaagatcct ttgatctttt ctacggggtc tgacgctcag 5700
tggaacgaaa actcacgtta agggattttg gtcatgagat tatcaaaaag gatcttcacc 5760
tagatccttt taaattaaaa atgaagtttt aaatcaatct aaagtatata tgagtaaact 5820
tggtctgaca gttaccaatg cttaatcagt gaggcaccta tctcagcgat ctgtctattt 5880
cgttcatcca tagttgcctg actccccgtc gtgtagataa ctacgatacg ggagggctta 5940

ccatctggcc ccagtgctgc aatgataccg cgagacccac gctcaccggc tccagattta 6000
tcagcaataa accagccagc cggaagggcc gagcgcagaa gtggtcctgc aactttatcc 6060
gcctccatcc agtctattaa ttgttgccgg gaagctagag taagtagttc gccagttaat 6120
agtttgcgca acgttgttgc cattgctaca ggcatcgtgg tgtcacgctc gtcgtttggt 6180
atggcttcat tcagctccgg ttcccaacga tcaaggcgag ttacatgatc ccccatgttg 6240
tgcaaaaaag cggttagctc cttcggtcct ccgatcgttg tcagaagtaa gttggccgca 6300
gtgttatcac tcatggttat ggcagcactg cataattctc ttactgtcat gccatccgta 6360
agatgctttt ctgtgactgg tgagtactca accaagtcat tctgagaata gtgtatgcgg 6420
cgaccgagtt gctcttgccc ggcgtcaata cgggataata ccgcgccaca tagcagaact 6480
ttaaaagtgc tcatcattgg aaaacgttct tcggggcgaa aactctcaag gatcttaccg 6540
ctgttgagat ccagttcgat gtaacccact cgtgcaccca actgatcttc agcatctttt 6600
actttcacca gcgtttctgg gtgagcaaaa acaggaaggc aaaatgccgc aaaaaaggga 6660
ataagggcga cacggaaatg ttgaatactc atactcttcc tttttcaata ttattgaagc 6720
atttatcagg gttattgtct catgagcgga tacatatttg aatgtattta gaaaaataaa 6780
caaatagggg ttccgcgcac atttccccga aaagtgccac ctgacgtc 6828

<210> 2
<211> 6900
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
2C7LBDBS

<400> 2
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttagat ctatggccca ggcggccctc gagccctatg cttgccctgt 960
cgagtcctgc gatcgccgct tttctaagtc ggctgatctg aagcgccata tccgcatcca 1020
cacaggccag aagcctttcc agtgtcgaat atgcatgcgt aacttcagtc gtagtgacca 1080
ccttaccacc cacatccgca cccacacagg cgagaagcct tttgcctgtg acatttgtgg 1140
gaggaagttt gccaggagtg atgaacgcaa gaggcatacc aaaatccata ccggtgagaa 1200
gccctatgct tgccctgtcg agtcctgcga tcgccgcttt tctaagtcgg ctgatctgaa 1260
gcgccatatc cgcatccaca caggccagaa gcccttccag tgtcgaatat gcatgcgtaa 1320
cttcagtcgt agtgaccacc ttaccaccca catccgcacc cacacaggcg agaagccttt 1380
tgcctgtgac atttgtggga ggaagtttgc caggagtgat gaacgcaaga ggcataccaa 1440
aatccattta agacagaggg actctagaac tagtgaccga agaggaggga gaatgttgaa 1500
acacaagcgc cagagagatg atggggaggg caggggtgaa gtggggtctg ctggagacat 1560
gagagctgcc aacctttggc caagcccgct catgatcaaa cgctctaaga agaacagcct 1620
ggccttgtcc ctgacggccg accagatggt cagtgccttg ttggatgctg agccccccat 1680
actctattcc gagtatgatc ctaccagacc cttcagtgaa gcttcgatga tgggcttact 1740
gaccaacctg gcagacaggg agctggttca catgatcaac tgggcgaaga gggtgccagg 1800
ctttgtggat ttgaccctcc atgatcaggt ccaccttcta gaatgtgcct ggctagagat 1860
cctgatgatt ggtctcgtct ggcgctccat ggagcaccca gggaagctac tgtttgctcc 1920
taacttgctc ttggacagga accagggaaa atgtgtagag ggcatggtgg agatcttcga 1980
catgctgctg gctacatcat ctcggttccg catgatgaat ctgcagggag aggagtttgt 2040
gtgcctcaaa tctattattt tgcttaattc tggagtgtac acatttctgt ccagcaccct 2100
gaagtctctg gaagagaagg accatatcca ccgagtcctg gacaagatca cagacacttt 2160
gatccacctg atggccaagg caggcctgac cctgcagcag cagcaccagc ggctggccca 2220
gctcctcctc atcctctccc acatcaggca catgagtaac aaaggcatgg agcatctgta 2280
cagcatgaag tgcaagaacg tggtgcccct ctatgacctg ctgctggaga tgctggacgc 2340

ccaccgccta catgcgccca ctagccgtac gccggccgac gccctggacg acttcgacct 2400
ggacatgctg ccggccgacg ccctggacga cttcgacctg gacatgctgc cggccgacgc 2460
cctggacgac ttcgacctgg acatgctgcc ggggtaacta agtaagcggc cgctcgagtc 2520
tagagggccc gtttaaaccc gctgatcagc ctcgactgtg ccttctagtt gccagccatc 2580
tgttgtttgc ccctcccccg tgccttcctt gaccctggaa ggtgccactc ccactgtcct 2640
ttcctaataa aatgaggaaa ttgcatcgca ttgtctgagt aggtgtcatt ctattctggg 2700
gggtggggtg gggcaggaca gcaaggggga ggattgggaa gacaatagca ggcatgctgg 2760
ggatgcggtg ggctctatgg cttctgaggc ggaaagaacc agctggggct ctagggggta 2820
tccccacgcg ccctgtagcg gcgcattaag cgcggcgggt gtggtggtta cgcgcagcgt 2880
gaccgctaca cttgccagcg ccctagcgcc cgctcctttc gctttcttcc cttcctttct 2940
cgccacgttc gccggctttc cccgtcaagc tctaaatcgg ggcatccctt tagggttccg 3000
atttagtgct ttacggcacc tcgaccccaa aaaacttgat tagggtgatg gttcacgtag 3060
tgggccatcg ccctgataga cggtttttcg ccctttgacg ttggagtcca cgttctttaa 3120
tagtggactc ttgttccaaa ctggaacaac actcaaccct atctcggtct attcttttga 3180
tttataaggg attttgggga tttcggccta ttggttaaaa aatgagctga tttaacaaaa 3240
atttaacgcg aattaattct gtggaatgtg tgtcagttag ggtgtggaaa gtccccaggc 3300
tccccaggca ggcagaagta tgcaaagcat gcatctcaat tagtcagcaa ccaggtgtgg 3360
aaagtcccca ggctccccag caggcagaag tatgcaaagc atgcatctca attagtcagc 3420
aaccatagtc ccgcccctaa ctccgcccat cccgccccta actccgccca gttccgccca 3480
ttctccgccc catggctgac taattttttt tatttatgca gaggccgagg ccgcctctgc 3540
ctctgagcta ttccagaagt agtgaggagg cttttttgga ggcctaggct tttgcaaaaa 3600
gctcccggga gcttgtatat ccattttcgg atctgatcaa gagacaggat gaggatcgtt 3660
tcgcatgatt gaacaagatg gattgcacgc aggttctccg gccgcttggg tggagaggct 3720
attcggctat gactgggcac aacagacaat cggctgctct gatgccgccg tgttccggct 3780
gtcagcgcag gggcgcccgg ttctttttgt caagaccgac ctgtccggtg ccctgaatga 3840
actgcaggac gaggcagcgc ggctatcgtg gctggccacg acgggcgttc cttgcgcagc 3900
tgtgctcgac gttgtcactg aagcgggaag ggactggctg ctattgggcg aagtgccggg 3960
gcaggatctc ctgtcatctc accttgctcc tgccgagaaa gtatccatca tggctgatgc 4020
aatgcggcgg ctgcatacgc ttgatccggc tacctgccca ttcgaccacc aagcgaaaca 4080
tcgcatcgag cgagcacgta ctcggatgga agccggtctt gtcgatcagg atgatctgga 4140
cgaagagcat caggggctcg cgccagccga actgttcgcc aggctcaagg cgcgcatgcc 4200
cgacggcgag gatctcgtcg tgacccatgg cgatgcctgc ttgccgaata tcatggtgga 4260
aaatggccgc ttttctggat tcatcgactg tggccggctg ggtgtggcgg accgctatca 4320
ggacatagcg ttggctaccc gtgatattgc tgaagagctt ggcggcgaat gggctgaccg 4380
cttcctcgtg ctttacggta tcgccgctcc cgattcgcag cgcatcgcct tctatcgcct 4440
tcttgacgag ttcttctgag cgggactctg gggttcgaaa tgaccgacca agcgacgccc 4500
aacctgccat cacgagattt cgattccacc gccgccttct atgaaaggtt gggcttcgga 4560
atcgttttcc gggacgccgg ctggatgatc ctccagcgcg gggatctcat gctggagttc 4620
ttcgcccacc ccaacttgtt tattgcagct tataatggtt acaaataaag caatagcatc 4680
acaaatttca caaataaagc atttttttca ctgcattcta gttgtggttt gtccaaactc 4740
atcaatgtat cttatcatgt ctgtataccg tcgacctcta gctagagctt ggcgtaatca 4800
tggtcatagc tgtttcctgt gtgaaattgt tatccgctca caattccaca caacatacga 4860
gccggaagca taaagtgtaa agcctggggt gcctaatgag tgagctaact cacattaatt 4920
gcgttgcgct cactgcccgc tttccagtcg ggaaacctgt cgtgccagct gcattaatga 4980
atcggccaac gcgcggggag aggcggtttg cggcgagcgg tatcagctca ctcaaaggcg 5040
gtaatacggt tatccacaga atcaggggat aacgcaggaa agaacatgtg agcaaaaggc 5100
cagcaaaagg ccaggaaccg taaaaaggcc gcgttgctgg cgtttttcca taggctccgc 5160
ccccctgacg agcatcacaa aaatcgacgc tcaagtcaga ggtggcgaaa cccgacagga 5220
ctataaagat accaggcgtt tccccctgga agctccctcg tgcgctctcc tgttccgacc 5280
ctgccgctta ccggatacct gtccgccttt ctcccttcgg gaagcgtggc gctttctcaa 5340
tgctcacgct gtaggtatct cagttcggtg taggtcgttc gctccaagct gggctgtgtg 5400
cacgaacccc ccgttcagcc cgaccgctgc gccttatccg gtaactatcg tcttgagtcc 5460
aacccggtaa gacacgactt atcgccactg gcagcagcca ctggtaacag gattagcaga 5520
gcgaggtatg taggcggtgc tacagagttc ttgaagtggt ggcctaacta cggctacact 5580
agaaggacag tatttggtat ctgcgctctg ctgaagccag ttaccttcgg aaaaagagtt 5640
ggtagctctt gatccggcaa acaaaccacc gctggtagcg gtggtttttt tgtttgcaag 5700
cagcagatta cgcgcagaaa aaaaggatct caagaagatc ctttgatctt ttctacgggg 5760
tctgacgctc agtggaacga aaactcacgt taagggattt tggtcatgag attatcaaaa 5820
aggatcttca cctagatcct tttaaattaa aaatgaagtt ttaaatcaat ctaaagtata 5880
tatgagtaaa cttggtctga cagttaccaa tgcttaatca gtgaggcacc tatctcagcg 5940
atctgtctat ttcgttcatc catagttgcc tgactccccg tcgtgtagat aactacgata 6000
cgggagggct taccatctgg ccccagtgct gcaatgatac cgcgagaccc acgctcaccg 6060
gctccagatt tatcagcaat aaaccagcca gccggaaggg ccgagcgcag aagtggtcct 6120
gcaactttat ccgcctccat ccagtctatt aattgttgcc gggaagctag agtaagtagt 6180
tcgccagtta atagtttgcg caacgttgtt gccattgcta caggcatcgt ggtgtcacgc 6240
tcgtcgtttg gtatggcttc attcagctcc ggttcccaac gatcaaggcg agttacatga 6300
tcccccatgt tgtgcaaaaa agcggttagc tccttcggtc ctccgatcgt tgtcagaagt 6360

aagttggccg cagtgttatc actcatggtt atggcagcac tgcataattc tcttactgtc 6420
atgccatccg taagatgctt ttctgtgact ggtgagtact caaccaagtc attctgagaa 6480
tagtgtatgc ggcgaccgag ttgctcttgc ccggcgtcaa tacgggataa taccgcgcca 6540
catagcagaa ctttaaaagt gctcatcatt ggaaaacgtt cttcggggcg aaaactctca 6600
aggatcttac cgctgttgag atccagttcg atgtaaccca ctcgtgcacc caactgatct 6660
tcagcatctt ttactttcac cagcgtttct gggtgagcaa aaacaggaag gcaaaatgcc 6720
gcaaaaaagg gaataagggc gacacggaaa tgttgaatac tcatactctt cctttttcaa 6780
tattattgaa gcatttatca gggttattgt ctcatgagcg gatacatatt tgaatgtatt 6840
tagaaaaata aacaaatagg ggttccgcgc acatttcccc gaaaagtgcc acctgacgtc 6900

<210> 3
<211> 7038
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
2C7LBDCS

<400> 3
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttagat ctatggccca ggcggccctc gagccctatg cttgccctgt 960
cgagtcctgc gatcgccgct tttctaagtc ggctgatctg aagcgccata tccgcatcca 1020
cacaggccag aagcctttcc agtgtcgaat atgcatgcgt aacttcagtc gtagtgacca 1080
ccttaccacc cacatccgca cccacacagg cgagaagcct tttgcctgtg acatttgtgg 1140
gaggaagttt gccaggagtg atgaacgcaa gaggcatacc aaaatccata ccggtgagaa 1200
gccctatgct tgccctgtcg agtcctgcga tcgccgcttt tctaagtcgg ctgatctgaa 1260
gcgccatatc cgcatccaca caggccagaa gcccttccag tgtcgaatat gcatgcgtaa 1320
cttcagtcgt agtgaccacc ttaccaccca catccgcacc cacacaggcg agaagccttt 1380
tgcctgtgac atttgtggga ggaagtttgc caggagtgat gaacgcaaga ggcataccaa 1440
aatccattta agacagaggg actctagaac tagtagtatt caaggacata acgactatat 1500
gtgtccagcc accaaccagt gcaccattga taaaaacagg aggaagagct gccaggcctg 1560
ccggctccgc aaatgctacg aagtgggaat gatgaaaggt gggatacgaa aagaccgaag 1620
aggagggaga atgttgaaac acaagcgcca gagagatgat ggggagggca ggggtgaagt 1680
ggggtctgct ggagacatga gagctgccaa cctttggcca agcccgctca tgatcaaacg 1740
ctctaagaag aacagcctgg ccttgtccct gacggccgac cagatggtca gtgccttgtt 1800
ggatgctgag ccccccatac tctattccga gtatgatcct accagaccct tcagtgaagc 1860
ttcgatgatg ggcttactga ccaacctggc agacagggag ctggttcaca tgatcaactg 1920
ggcgaagagg gtgccaggct ttgtggattt gaccctccat gatcaggtcc accttctaga 1980
atgtgcctgg ctagagatcc tgatgattgg tctcgtctgg cgctccatgg agcacccagg 2040
gaagctactg tttgctccta acttgctctt ggacaggaac cagggaaaat gtgtagaggg 2100
catggtggag atcttcgaca tgctgctggc tacatcatct cggttccgca tgatgaatct 2160
gcagggagag gagtttgtgt gcctcaaatc tattattttg cttaattctg gagtgtacac 2220
atttctgtcc agcaccctga agtctctgga agagaaggac catatccacc gagtcctgga 2280
caagatcaca gacactttga tccacctgat ggccaaggca ggcctgaccc tgcagcagca 2340
gcaccagcgg ctggcccagc tcctcctcat cctctcccac atcaggcaca tgagtaacaa 2400
aggcatggag catctgtaca gcatgaagtg caagaacgtg gtgcccctct atgacctgct 2460
gctggagatg ctggacgccc accgcctaca tgcgcccact agccgtacgc cggccgacgc 2520
cctggacgac ttcgacctgg acatgctgcc ggccgacgcc ctggacgact tcgacctgga 2580
catgctgccg gccgacgccc tggacgactt cgacctggac atgctgccgg ggtaactaag 2640
taagcggccg ctcgagtcta gagggcccgt ttaaacccgc tgatcagcct cgactgtgcc 2700

ttctagttgc cagccatctg ttgtttgccc ctcccccgtg ccttccttga ccctggaagg 2760
tgccactccc actgtccttt cctaataaaa tgaggaaatt gcatcgcatt gtctgagtag 2820
gtgtcattct attctggggg gtggggtggg gcaggacagc aagggggagg attgggaaga 2880
caatagcagg catgctgggg atgcggtggg ctctatggct tctgaggcgg aaagaaccag 2940
ctggggctct agggggtatc cccacgcgcc ctgtagcggc gcattaagcg cggcgggtgt 3000
ggtggttacg cgcagcgtga ccgctacact tgccagcgcc ctagcgcccg ctcctttcgc 3060
tttcttccct tcctttctcg ccacgttcgc cggctttccc cgtcaagctc taaatcgggg 3120
catcccttta gggttccgat ttagtgcttt acggcacctc gaccccaaaa aacttgatta 3180
gggtgatggt tcacgtagtg ggccatcgcc ctgatagacg gtttttcgcc ctttgacgtt 3240
ggagtccacg ttctttaata gtggactctt gttccaaact ggaacaacac tcaaccctat 3300
ctcggtctat tcttttgatt tataagggat tttggggatt tcggcctatt ggttaaaaaa 3360
tgagctgatt taacaaaaat ttaacgcgaa ttaattctgt ggaatgtgtg tcagttaggg 3420
tgtggaaagt ccccaggctc cccaggcagg cagaagtatg caaagcatgc atctcaatta 3480
gtcagcaacc aggtgtggaa agtccccagg ctccccagca ggcagaagta tgcaaagcat 3540
gcatctcaat tagtcagcaa ccatagtccc gcccctaact ccgcccatcc cgcccctaac 3600
tccgcccagt tccgcccatt ctccgcccca tggctgacta atttttttta tttatgcaga 3660
ggccgaggcc gcctctgcct ctgagctatt ccagaagtag tgaggaggct tttttggagg 3720
cctaggcttt tgcaaaaagc tcccgggagc ttgtatatcc attttcggat ctgatcaaga 3780
gacaggatga ggatcgtttc gcatgattga acaagatgga ttgcacgcag gttctccggc 3840
cgcttgggtg gagaggctat tcggctatga ctgggcacaa cagacaatcg gctgctctga 3900
tgccgccgtg ttccggctgt cagcgcaggg gcgcccggtt ctttttgtca agaccgacct 3960
gtccggtgcc ctgaatgaac tgcaggacga ggcagcgcgg ctatcgtggc tggccacgac 4020
gggcgttcct tgcgcagctg tgctcgacgt tgtcactgaa gcgggaaggg actggctgct 4080
attgggcgaa gtgccggggc aggatctcct gtcatctcac cttgctcctg ccgagaaagt 4140
atccatcatg gctgatgcaa tgcggcggct gcatacgctt gatccggcta cctgcccatt 4200
cgaccaccaa gcgaaacatc gcatcgagcg agcacgtact cggatggaag ccggtcttgt 4260
cgatcaggat gatctggacg aagagcatca ggggctcgcg ccagccgaac tgttcgccag 4320
gctcaaggcg cgcatgcccg acggcgagga tctcgtcgtg acccatggcg atgcctgctt 4380
gccgaatatc atggtggaaa atggccgctt ttctggattc atcgactgtg gccggctggg 4440
tgtggcggac cgctatcagg acatagcgtt ggctacccgt gatattgctg aagagcttgg 4500
cggcgaatgg gctgaccgct tcctcgtgct ttacggtatc gccgctcccg attcgcagcg 4560
catcgccttc tatcgccttc ttgacgagtt cttctgagcg ggactctggg gttcgaaatg 4620
accgaccaag cgacgcccaa cctgccatca cgagatttcg attccaccgc cgccttctat 4680
gaaaggttgg gcttcggaat cgttttccgg gacgccggct ggatgatcct ccagcgcggg 4740
gatctcatgc tggagttctt cgcccacccc aacttgttta ttgcagctta taatggttac 4800
aaataaagca atagcatcac aaatttcaca aataaagcat ttttttcact gcattctagt 4860
tgtggtttgt ccaaactcat caatgtatct tatcatgtct gtataccgtc gacctctagc 4920
tagagcttgg cgtaatcatg gtcatagctg tttcctgtgt gaaattgtta tccgctcaca 4980
attccacaca acatacgagc cggaagcata aagtgtaaag cctggggtgc ctaatgagtg 5040
agctaactca cattaattgc gttgcgctca ctgcccgctt tccagtcggg aaacctgtcg 5100
tgccagctgc attaatgaat cggccaacgc gcggggagag gcggtttgcg gcgagcggta 5160
tcagctcact caaaggcggt aatacggtta tccacagaat caggggataa cgcaggaaag 5220
aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta aaaaggccgc gttgctggcg 5280
tttttccata ggctccgccc ccctgacgag catcacaaaa atcgacgctc aagtcagagg 5340
tggcgaaacc cgacaggact ataaagatac caggcgtttc cccctggaag ctccctcgtg 5400
cgctctcctg ttccgaccct gccgcttacc ggatacctgt ccgcctttct cccttcggga 5460
agcgtggcgc tttctcaatg ctcacgctgt aggtatctca gttcggtgta ggtcgttcgc 5520
tccaagctgg gctgtgtgca cgaacccccc gttcagcccg accgctgcgc cttatccggt 5580
aactatcgtc ttgagtccaa cccggtaaga cacgacttat cgccactggc agcagccact 5640
ggtaacagga ttagcagagc gaggtatgta ggcggtgcta cagagttctt gaagtggtgg 5700
cctaactacg gctacactag aaggacagta tttggtatct gcgctctgct gaagccagtt 5760
accttcggaa aaagagttgg tagctcttga tccggcaaac aaaccaccgc tggtagcggt 5820
ggtttttttg tttgcaagca gcagattacg cgcagaaaaa aaggatctca agaagatcct 5880
ttgatctttt ctacggggtc tgacgctcag tggaacgaaa actcacgtta agggattttg 5940
gtcatgagat tatcaaaaag gatcttcacc tagatccttt taaattaaaa atgaagtttt 6000
aaatcaatct aaagtatata tgagtaaact tggtctgaca gttaccaatg cttaatcagt 6060
gaggcaccta tctcagcgat ctgtctattt cgttcatcca tagttgcctg actccccgtc 6120
gtgtagataa ctacgatacg ggagggctta ccatctggcc ccagtgctgc aatgataccg 6180
cgagacccac gctcaccggc tccagattta tcagcaataa accagccagc cggaagggcc 6240
gagcgcagaa gtggtcctgc aactttatcc gcctccatcc agtctattaa ttgttgccgg 6300
gaagctagag taagtagttc gccagttaat agtttgcgca acgttgttgc cattgctaca 6360
ggcatcgtgg tgtcacgctc gtcgtttggt atggcttcat tcagctccgg ttcccaacga 6420
tcaaggcgag ttacatgatc ccccatgttg tgcaaaaaag cggttagctc cttcggtcct 6480
ccgatcgttg tcagaagtaa gttggccgca gtgttatcac tcatggttat ggcagcactg 6540
cataattctc ttactgtcat gccatccgta agatgctttt ctgtgactgg tgagtactca 6600
accaagtcat tctgagaata gtgtatgcgg cgaccgagtt gctcttgccc ggcgtcaata 6660
cgggataata ccgcgccaca tagcagaact ttaaaagtgc tcatcattgg aaaacgttct 6720

tcggggcgaa aactctcaag gatcttaccg ctgttgagat ccagttcgat gtaacccact 6780
cgtgcaccca actgatcttc agcatctttt actttcacca gcgtttctgg gtgagcaaaa 6840
acaggaaggc aaaatgccgc aaaaaaggga ataagggcga cacggaaatg ttgaatactc 6900
atactcttcc tttttcaata ttattgaagc atttatcagg gttattgtct catgagcgga 6960
tacatatttg aatgtattta gaaaaataaa caaatagggg ttccgcgcac atttccccga 7020
aaagtgccac ctgacgtc 7038

<210> 4
<211> 1496
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7PBDVP16

<400> 4
ggtaccggat ccgccaccat ggcccaggcg gccctcgagc cctatgcttg ccctgtcgag 60
tcctgcgatc gccgcttttc taagtcggct gatctgaagc gccatatccg catccacaca 120
ggccagaagc ccttccagtg tcgaatatgc atgcgtaact tcagtcgtag tgaccacctt 180
accacccaca tccgcaccca cacaggcgag aagccttttg cctgtgacat ttgtgggagg 240
aagtttgcca ggagtgatga acgcaagagg cataccaaaa tccatttaag acagaaggac 300
tctagaacta gtggccaggc cggccgcgtc gaccagaaaa agttcaataa agtcagagtt 360
gtgagagcac tggatgctgt tgctctccca cagccagtgg gcgttccaaa tgaaagccaa 420
gccctaagcc agagattcac tttttcacca ggtcaagaca tacagttgat tccaccactg 480
atcaacctgt taatgagcat tgaaccagat gtgatctatg caggacatga caacacaaaa 540
cctgacacct ccagttcttt gctgacaagt cttaatcaac taggcgagag gcaacttctt 600
tcagtagtca agtggtctaa atcattgcca ggttttcgaa acttacatat tgatgaccag 660
ataactctca ttcagtattc ttggatgagc ttaatggtgt ttggtctagg atggagatcc 720
tacaaacacg tcagtgggca gatgctgtat tttgcacctg atctaatact aaatgaacag 780
cggatgaaag aatcatcatt ctattcatta tgccttacca tgtggcagat cccacaggag 840
tttgtcaagc ttcaagttag ccaagaagag ttcctctgta tgaaagtatt gttacttctt 900
aatacaattc ctttggaagg gctacgaagt caaacccagt ttgaggagat gaggtcaagc 960
tacattagag agctcatcaa ggcaattggt ttgaggcaaa aaggagttgt gtcgagctca 1020
cagcgtttct atcaacttac aaaacttctt gataacttgc atgatcttgt caaacaactt 1080
catctgtact gcttgaatac atttatccag tcccgggcac tgagtgttga atttccagaa 1140
atgatgtctg aagttattgc tgggtcgacg gctagcccga aaaagaaacg caaagttggg 1200
cgcgccggcg ctcccccgac cgatgtcagc ctgggggacg agctccactt agacggcgag 1260
gacgtggcga tggcgcatgc cgacgcgcta gacgatttcg atctggacat gttgggggac 1320
ggggattccc cgggtccggg atttaccccc cacgactccg ccccctacgg cgctctggat 1380
atggccgact tcgagtttga gcagatgttt accgatgccc ttggaattga cgagtacggt 1440
ttaattaact acccgtacga cgttccggac tacgcttctt gagaattcgc ggccgc 1496

<210> 5
<211> 6746
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7LBDAL

<400> 5
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600

tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtt ctgctggaga catgagagct gccaaccttt ggccaagccc gctcatgatc 1320
aaacgctcta agaagaacag cctggccttg tccctgacgg ccgaccagat ggtcagtgcc 1380
ttgttggatg ctgagccccc catactctat tccgagtatg atcctaccag acccttcagt 1440
gaagcttcga tgatgggctt actgaccaac ctggcagaca gggagctggt tcacatgatc 1500
aactgggcga agagggtgcc aggctttgtg gatttgaccc tccatgatca ggtccacctt 1560
ctagaatgtg cctggctaga gatcctgatg attggtctcg tctggcgctc catggagcac 1620
ccagggaagc tactgtttgc tcctaacttg ctcttggaca ggaaccaggg aaaatgtgta 1680
gagggcatgg tggagatctt cgacatgctg ctggctacat catctcggtt ccgcatgatg 1740
aatctgcagg gagaggagtt tgtgtgcctc aaatctatta ttttgcttaa ttctggagtg 1800
tacacatttc tgtccagcac cctgaagtct ctggaagaga aggaccatat ccaccgagtc 1860
ctggacaaga tcacagacac tttgatccac ctgatggcca aggcaggcct gaccctgcag 1920
cagcagcacc agcggctggc ccagctcctc ctcatcctct cccacatcag gcacatgagt 1980
aacaaaggca tggagcatct gtacagcatg aagtgcaaga acgtggtgcc cctctatgac 2040
ctgctgctgg agatgctgga cgcccaccgc ctacatgcgc ccactagccg tggaggggca 2100
tccgtggagg agacggacca aagccacttg gccactgcgg gctctacttc atcgcattcc 2160
ttgcaaaagt attacatcac gggggaggca gagggtttcc ctgccacagt ccgtacgccg 2220
gccgacgccc tggacgactt cgacctggac atgctgccgg ccgacgccct ggacgacttc 2280
gacctggaca tgctgccggc cgacgccctg gacgacttcg acctggacat gctgccgggg 2340
taactaagta agcggccgct cgagtctaga gggcccgttt aaacccgctg atcagcctcg 2400
actgtgcctt ctagttgcca gccatctgtt gtttgcccct cccccgtgcc ttccttgacc 2460
ctggaaggtg ccactcccac tgtcctttcc taataaaatg aggaaattgc atcgcattgt 2520
ctgagtaggt gtcattctat tctgggggggt ggggtggggc aggacagcaa gggggaggat 2580
tgggaagaca atagcaggca tgctggggat gcggtgggct ctatggcttc tgaggcggaa 2640
agaaccagct ggggctctag ggggtatccc cacgcgccct gtagcggcgc attaagcgcg 2700
gcgggtgtgg tggttacgcg cagcgtgacc gctacacttg ccagcgccct agcgcccgct 2760
cctttcgctt tcttcccttc ctttctcgcc acgttcgccg gctttccccg tcaagctcta 2820
aatcggggca tccctttagg gttccgattt agtgctttac ggcacctcga ccccaaaaaa 2880
cttgattagg gtgatggttc acgtagtggg ccatcgccct gatagacggt ttttcgccct 2940
ttgacgttgg agtccacgtt ctttaatagt ggactcttgt tccaaactgg aacaacactc 3000
aaccctatct cggtctattc ttttgattta taagggattt tggggatttc ggcctattgg 3060
ttaaaaaatg agctgattta acaaaaattt aacgcgaatt aattctgtgg aatgtgtgtc 3120
agttagggtg tggaaagtcc ccaggctccc caggcaggca gaagtatgca aagcatgcat 3180
ctcaattagt cagcaaccag gtgtggaaag tccccaggct ccccagcagg cagaagtatg 3240
caaagcatgc atctcaatta gtcagcaacc atagtcccgc ccctaactcc gcccatcccg 3300
cccctaactc cgcccagttc cgcccattct ccgccccatg gctgactaat tttttttatt 3360
tatgcagagg ccgaggccgc ctctgcctct gagctattcc agaagtagtg aggaggcttt 3420
tttggaggcc taggcttttg caaaaagctc ccgggagctt gtatatccat tttcggatct 3480
gatcaagaga caggatgagg atcgtttcgc atgattgaac aagatggatt gcacgcaggt 3540
tctccggccg cttgggtgga gaggctattc ggctatgact gggcacaaca gacaatcggc 3600
tgctctgatg ccgccgtgtt ccggctgtca gcgcaggggc gcccggttct ttttgtcaag 3660
accgacctgt ccggtgccct gaatgaactg caggacgagg cagcgcggct atcgtggctg 3720
gccacgacgg gcgttccttg cgcagctgtg ctcgacgttg tcactgaagc gggaagggac 3780
tggctgctat tgggcgaagt gccggggcag gatctcctgt catctcacct tgctcctgcc 3840
gagaaagtat ccatcatggc tgatgcaatg cggcggctgc atacgcttga tccggctacc 3900
tgcccattcg accaccaagc gaaacatcgc atcgagcgag cacgtactcg gatggaagcc 3960
ggtcttgtcg atcaggatga tctggacgaa gagcatcagg ggctcgcgcc agccgaactg 4020
ttcgccaggc tcaaggcgcg catgcccgac ggcgaggatc tcgtcgtgac ccatggcgat 4080
gcctgcttgc cgaatatcat ggtggaaaat ggccgctttt ctggattcat cgactgtggc 4140
cggctgggtg tggcggaccg ctatcaggac atagcgttgg ctacccgtga tattgctgaa 4200
gagcttggcg gcgaatgggc tgaccgcttc ctcgtgcttt acggtatcgc cgctcccgat 4260
tcgcagcgca tcgccttcta tcgccttctt gacgagttct tctgagcggg actctggggt 4320
tcgaaatgac cgaccaagcg acgcccaacc tgccatcacg agatttcgat tccaccgccg 4380
ccttctatga aaggttgggc ttcggaatcg ttttccggga cgccggctgg atgatcctcc 4440
agcgcgggga tctcatgctg gagttcttcg cccaccccaa cttgtttatt gcagcttata 4500
atggttacaa ataaagcaat agcatcacaa atttcacaaa taaagcattt ttttcactgc 4560
attctagttg tggtttgtcc aaactcatca atgtatctta tcatgtctgt ataccgtcga 4620


cctctagcta gagcttggcg taatcatggt catagctgtt tcctgtgtga aattgttatc 4680
cgctcacaat tccacacaac atacgagccg gaagcataaa gtgtaaagcc tggggtgcct 4740
aatgagtgag ctaactcaca ttaattgcgt tgcgctcact gcccgctttc agtcgggaa 4800
acctgtcgtg ccagctgcat taatgaatcg gccaacgcgc ggggagaggc ggtttgcggc 4860
gagcggtatc agctcactca aaggcggtaa tacggttatc cacagaatca ggggataacg 4920
caggaaagaa catgtgagca aaaggccagc aaaaggccag gaaccgtaaa aaggccgcgt 4980
tgctggcgtt tttccatagg ctccgccccc ctgacgagca tcacaaaaat cgacgctcaa 5040
gtcagaggtg gcgaaacccg acaggactat aaagatacca ggcgtttccc cctggaagct 5100
ccctcgtgcg ctctcctgtt ccgaccctgc cgcttaccgg atacctgtcc gcctttctcc 5160
cttcgggaag cgtggcgctt tctcaatgct cacgctgtag gtatctcagt tcggtgtagg 5220
tcgttcgctc caagctgggc tgtgtgcacg aacccccccgt tcagcccgac cgctgcgcct 5280
tatccggtaa ctatcgtctt gagtccaacc cggtaagaca cgacttatcg ccactggcag 5340
cagccactgg taacaggatt agcagagcga ggtatgtagg cggtgctaca gagttcttga 5400
agtggtggcc taactacggc tacactagaa ggacagtatt tggtatctgc gctctgctga 5460
agccagttac cttcggaaaa agagttggta gctcttgatc cggcaaacaa accaccgctg 5520
gtagcggtgg ttttttgtt tgcaagcagc agattacgcg cagaaaaaaa ggatctcaag 5580
aagatccttt gatcttttct acggggtctg acgctcagtg gaacgaaaac tcacgttaag 5640
ggattttggt catgagatta tcaaaaagga tcttcaccta gatcctttta aattaaaaat 5700
gaagttttaa atcaatctaa agtatatatg agtaaacttg gtctgacagt taccaatgct 5760
taatcagtga ggcacctatc tcagcgatct gtctatttcg ttcatccata gttgcctgac 5820
tccccgtcgt gtagataact acgatacggg agggcttacc atctggcccc agtgctgcaa 5880
tgataccgcg agacccacgc tcaccggctc cagatttatc agcaataaac cagccagccg 5940
gaagggccga gcgcagaagt ggtcctgcaa ctttatccgc ctccatccag tctattaatt 6000
gttgccggga agctagagta agtagttcgc cagttaatag tttgcgcaac gttgttgcca 6060
ttgctacagg catcgtggtg tcacgctcgt cgtttggtat ggcttcattc agctccggtt 6120
cccaacgatc aaggcgagtt acatgatccc ccatgttgtg caaaaaagcg gttagctcct 6180
tcggtcctcc gatcgttgtc agaagtaagt tggccgcagt gttatcactc atggttatgg 6240
cagcactgca taattctctt actgtcatgc catccgtaag atgcttttct gtgactggtg 6300
agtactcaac caagtcattc tgagaatagt gtatgcggcg accgagttgc tcttgcccgg 6360
cgtcaatacg ggataatacc gcgccacata gcagaacttt aaaagtgctc atcattggaa 6420
aacgttcttc ggggcgaaaa ctctcaagga tcttaccgct gttgagatcc agttcgatgt 6480
aacccactcg tgcacccaac tgatcttcag catcttttac tttcaccagc gtttctgggt 6540
gagcaaaaac aggaaggcaa aatgccgcaa aaaagggaat aagggcgaca cggaaatgtt 6600
gaatactcat actcttcctt tttcaatatt attgaagcat ttatcagggt tattgtctca 6660
tgagcggata catatttgaa tgtatttaga aaaataaaca aatagggggtt ccgcgcacat 6720
ttccccgaaa agtgccacct gacgtc 6746

<210> 6
<211> 6623
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7LBDAS

<400> 6
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080

cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtt ctgctggaga catgagagct gccaaccttt ggccaagccc gctcatgatc 1320
aaacgctcta agaagaacag cctggccttg tccctgacgg ccgaccagat ggtcagtgcc 1380
ttgttggatg ctgagccccc catactctat tccgagtatg atcctaccag acccttcagt 1440
gaagcttcga tgatgggctt actgaccaac ctggcagaca gggagctggt tcacatgatc 1500
aactgggcga agagggtgcc aggctttgtg gatttgaccc tccatgatca ggtccacctt 1560
ctagaatgtg cctggctaga gatcctgatg attggtctcg tctggcgctc catggagcac 1620
ccagggaagc tactgtttgc tcctaacttg ctcttggaca ggaaccaggg aaaatgtgta 1680
gagggcatgg tggagatctt cgacatgctg ctggctacat catctcggtt ccgcatgatg 1740
aatctgcagg gagaggagtt tgtgtgcctc aaatctatta ttttgcttaa ttctggagtg 1800
tacacatttc tgtccagcac cctgaagtct ctggaagaga aggaccatat ccaccgagtc 1860
ctggacaaga tcacagacac tttgatccac ctgatggcca aggcaggcct gaccctgcag 1920
cagcagcacc agcggctggc ccagctcctc ctcatcctct cccacatcag gcacatgagt 1980
aacaaaggca tggagcatct gtacagcatg aagtgcaaga acgtggtgcc cctctatgac 2040
ctgctgctgg agatgctgga cgcccaccgc ctacatgcgc ccactagccg tacgccggcc 2100
gacgccctgg acgacttcga cctggacatg ctgccggccg acgccctgga cgacttcgac 2160
ctggacatgc tgccggccga cgccctggac gacttcgacc tggacatgct gccggggtaa 2220
ctaagtaagc ggccgctcga gtctagaggg cccgtttaaa cccgctgatc agcctcgact 2280
gtgccttcta gttgccagcc atctgttgtt tgcccctccc ccgtgccttc cttgaccctg 2340
gaaggtgcca ctcccactgt cctttcctaa taaaatgagg aaattgcatc gcattgtctg 2400
agtaggtgtc attctattct ggggggtggg gtggggcagg acagcaaggg ggaggattgg 2460
gaagacaata gcaggcatgc tggggatgcg gtgggctcta tggcttctga ggcggaaaga 2520
accagctggg gctctagggg gtatccccac gcgccctgta gcggcgcatt aagcgcggcg 2580
ggtgtggtgg ttacgcgcag cgtgaccgct acacttgcca gcgccctagc gcccgctcct 2640
ttcgctttct tcccttcctt tctcgccacg ttcgccggct ttccccgtca agctctaaat 2700
cggggcatcc ctttagggtt ccgatttagt gctttacggc acctcgaccc caaaaaactt 2760
gattagggtg atggttcacg tagtgggcca tcgccctgat agacggtttt tcgccctttg 2820
acgttggagt ccacgttctt taatagtgga ctcttgttcc aaactggaac aacactcaac 2880
cctatctcgg tctattcttt tgatttataa gggattttgg ggatttcggc ctattggtta 2940
aaaaatgagc tgatttaaca aaaatttaac gcgaattaat tctgtggaat gtgtgtcagt 3000
tagggtgtgg aaagtcccca ggctccccag gcaggcagaa gtatgcaaag catgcatctc 3060
aattagtcag caaccaggtg tggaaagtcc ccaggctccc cagcaggcag aagtatgcaa 3120
agcatgcatc tcaattagtc agcaaccata gtcccgcccc taactccgcc catcccgccc 3180
ctaactccgc ccagttccgc ccattctccg ccccatggct gactaatttt ttttatttat 3240
gcagaggccg aggccgcctc tgcctctgag ctattccaga agtagtgagg aggctttttt 3300
ggaggcctag gcttttgcaa aaagctcccg ggagcttgta tatccatttt cggatctgat 3360
caagagacag gatgaggatc gtttcgcatg attgaacaag atggattgca cgcaggttct 3420
ccggccgctt gggtggagag gctattcggc tatgactggg cacaacagac aatcggctgc 3480
tctgatgccg ccgtgttccg gctgtcagcg caggggcgcc cggttctttt tgtcaagacc 3540
gacctgtccg gtgccctgaa tgaactgcag gacgaggcag cgcggctatc gtggctggcc 3600
acgacgggcg ttccttgcgc agctgtgctc gacgttgtca ctgaagcggg aagggactgg 3660
ctgctattgg gcgaagtgcc ggggcaggat ctcctgtcat ctcaccttgc tcctgccgag 3720
aaagtatcca tcatggctga tgcaatgcgg cggctgcata cgcttgatcc ggctacctgc 3780
ccattcgacc accaagcgaa acatcgcatc gagcgagcac gtactcggat ggaagccggt 3840
cttgtcgatc aggatgatct ggacgaagag catcaggggc tcgcgccagc cgaactgttc 3900
gccaggctca aggcgcgcat gcccgacggc gaggatctcg tcgtgaccca tggcgatgcc 3960
tgcttgccga atatcatggt ggaaaatggc cgcttttctg gattcatcga ctgtggccgg 4020
ctgggtgtgg cggaccgcta tcaggacata gcgttggcta cccgtgatat tgctgaagag 4080
cttggcggcg aatgggctga ccgcttcctc gtgctttacg gtatcgccgc tcccgattcg 4140
cagcgcatcg ccttctatcg ccttcttgac gagttcttct gagcgggact ctggggttcg 4200
aaatgaccga ccaagcgacg cccaacctgc catcacgaga tttcgattcc accgccgcct 4260
tctatgaaag gttgggcttc ggaatcgttt tccgggacgc cggctggatg atcctccagc 4320
gcggggatct catgctggag ttcttcgccc accccaactt gtttattgca gcttataatg 4380
gttacaaata aagcaatagc atcacaaatt tcacaaataa agcatttttt tcactgcatt 4440
ctagttgtgg tttgtccaaa ctcatcaatg tatcttatca tgtctgtata ccgtcgacct 4500
ctagctagag cttggcgtaa tcatggtcat agctgtttcc tgtgtgaaat tgttatccgc 4560
tcacaattcc acacaacata cgagccggaa gcataaagtg taaagcctgg ggtgcctaat 4620
gagtgagcta actcacatta attgcgttgc gctcactgcc cgctttccag tcgggaaacc 4680
tgtcgtgcca gctgcattaa tgaatcggcc aacgcgcggg gagaggcggt ttgcggcgag 4740
cggtatcagc tcactcaaag gcggtaatac ggttatccac agaatcaggg gataacgcag 4800
gaaagaacat gtgagcaaaa ggccagcaaa aggccaggaa ccgtaaaaag gccgcgttgc 4860
tggcgttttt ccataggctc cgcccccctg acgagcatca caaaaatcga cgctcaagtc 4920
agaggtggcg aaacccgaca ggactataaa gataccaggc gtttccccct ggaagctccc 4980
tcgtgcgctc tcctgttccg accctgccgc ttaccggata cctgtccgcc tttctccctt 5040
cgggaagcgt ggcgctttct caatgctcac gctgtaggta tctcagttcg gtgtaggtcg 5100

ttcgctccaa gctgggctgt gtgcacgaac cccccgttca gcccgaccgc tgcgccttat 5160
ccggtaacta tcgtcttgag tccaacccgg taagacacga cttatcgcca ctggcagcag 5220
ccactggtaa caggattagc agagcgaggt atgtaggcgg tgctacagag ttcttgaagt 5280
ggtggcctaa ctacggctac actagaagga cagtatttgg tatctgcgct ctgctgaagc 5340
cagttacctt cggaaaaaga gttggtagct cttgatccgg caaacaaacc accgctggta 5400
gcggtggttt ttttgtttgc aagcagcaga ttacgcgcag aaaaaaagga tctcaagaag 5460
atcctttgat cttttctacg gggtctgacg ctcagtggaa cgaaaactca cgttaaggga 5520
ttttggtcat gagattatca aaaaggatct tcacctagat ccttttaaat taaaaatgaa 5580
gttttaaatc aatctaaagt atatatgagt aaacttggtc tgacagttac caatgcttaa 5640
tcagtgaggc acctatctca gcgatctgtc tatttcgttc atccatagtt gcctgactcc 5700
ccgtcgtgta gataactacg atacgggagg gcttaccatc tggccccagt gctgcaatga 5760
taccgcgaga cccacgctca ccggctccag atttatcagc aataaaccag ccagccggaa 5820
gggccgagcg cagaagtggt cctgcaactt tatccgcctc catccagtct attaattgtt 5880
gccgggaagc tagagtaagt agttcgccag ttaatagttt gcgcaacgtt gttgccattg 5940
ctacaggcat cgtggtgtca cgctcgtcgt ttggtatggc ttcattcagc tccggttccc 6000
aacgatcaag gcgagttaca tgatccccca tgttgtgcaa aaaagcggtt agctccttcg 6060
gtcctccgat cgttgtcaga agtaagttgg ccgcagtgtt atcactcatg gttatggcag 6120
cactgcataa ttctcttact gtcatgccat ccgtaagatg cttttctgtg actggtgagt 6180
actcaaccaa gtcattctga gaatagtgta tgcggcgacc gagttgctct tgcccggcgt 6240
caatacggga taataccgcg ccacatagca gaactttaaa agtgctcatc attggaaaac 6300
gttcttcggg gcgaaaactc tcaaggatct taccgctgtt gagatccagt tcgatgtaac 6360
ccactcgtgc acccaactga tcttcagcat cttttacttt caccagcgtt tctgggtgag 6420
caaaaacagg aaggcaaaat gccgcaaaaa agggaataag ggcgacacgg aaatgttgaa 6480
tactcatact cttccttttt caatattatt gaagcattta tcagggttat tgtctcatga 6540
gcggatacat atttgaatgt atttagaaaa ataaacaaat aggggttccg cgcacatttc 6600
cccgaaaagt gccacctgac gtc 6623

<210> 7
<211> 6818
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7LBDBL

<400> 7
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtg accgaagagg agggagaatg ttgaaacaca agcgccagag agatgatggg 1320
gagggcaggg gtgaagtggg gtctgctgga gacatgagag ctgccaacct ttggccaagc 1380
ccgctcatga tcaaacgctc taagaagaac agcctggcct tgtccctgac ggccgaccag 1440
atggtcagtg ccttgttgga tgctgagccc cccatactct attccgagta tgatcctacc 1500
agacccttca gtgaagcttc gatgatgggc ttactgacca acctggcaga cagggagctg 1560
gttcacatga tcaactgggc gaagagggtg ccaggctttg tggatttgac cctccatgat 1620
caggtccacc ttctagaatg tgcctggcta gagatcctga tgattggtct cgtctggcgc 1680

tccatggagc acccagggaa gctactgttt gctcctaact tgctcttgga caggaaccag 1740
ggaaaatgtg tagagggcat ggtggagatc ttcgacatgc tgctggctac atcatctcgg 1800
ttccgcatga tgaatctgca gggagaggag tttgtgtgcc tcaaatctat tattttgctt 1860
aatttctgga tgtacacatt tctgtccagc accctgaagt ctctggaaga gaaggaccat 1920
atccaccgag tcctggacaa gatcacagac actttgatcc acctgatggc caaggcaggc 1980
ctgaccctgc agcagcagca ccagcggctg gcccagctcc tcctcatcct ctcccacatc 2040
aggcacatga gtaacaaagg catggagcat ctgtacagca tgaagtgcaa gaacgtggtg 2100
cccctctatg acctgctgct ggagatgctg gacgcccacc gcctacatgc gcccactagc 2160
cgtggagggg catccgtgga ggagacggac caaagccact tggccactgc gggctctact 2220
tcatcgcatt ccttgcaaaa gtattacatc acgggggagg cagagggttt ccctgccaca 2280
gtccgtacgc cggccgacgc cctggacgac ttcgacctgg acatgctgcc ggccgacgcc 2340
ctggacgact tcgacctgga catgctgccg gccgacgccc tggacgactt cgacctggac 2400
atgctgccgg ggtaactaag taagcggccg ctcgagtcta gagggcccgt ttaaacccgc 2460
tgatcagcct cgactgtgcc ttctagttgc cagccatctg ttgtttgccc ctccccccgtg 2520
ccttccttga ccctggaagg tgccactccc actgtccttt cctaataaaa tgaggaaatt 2580
gcatcgcatt gtctgagtag gtgtcattct attctggggg gtggggtggg gcaggacagc 2640
aaggggagg attgggaaga caatagcagg catgctgggg atgcggtggg ctctatggct 2700
tctgaggcgg aaagaaccag ctggggctct agggggtatc cccacgcgcc ctgtagcggc 2760
gcattaagcg cggcgggtgt ggtggttacg cgcagcgtga ccgctacact tgccagcgcc 2820
ctagcgcccg ctcctttcgc tttcttccct tcctttctcg ccacgttcgc cggctttccc 2880
cgtcaagctc taaatcgggg catcccttta gggttccgat ttagtgcttt acggcacctc 2940
gaccccaaaa aacttgatta gggtgatggt tcacgtagtg ggccatcgcc ctgatagacg 3000
gtttttcgcc ctttgacgtt ggagtccacg ttctttaata gtggactctt gttccaaact 3060
ggaacaacac tcaaccctat ctcggtctat tcttttgatt tataagggat tttggggatt 3120
tcggcctatt ggttaaaaaa tgagctgatt taacaaaaat ttaacgcgaa ttaattctgt 3180
ggaatgtgtg tcagttaggg tgtggaaagt ccccaggctc cccaggcagg cagaagtatg 3240
caaagcatgc atctcaatta gtcagcaacc aggtgtggaa agtccccagg ctccccagca 3300
ggcagaagta tgcaaagcat gcatctcaat tagtcagcaa ccatagtccc gcccctaact 3360
ccgcccatcc cgcccctaac tccgcccagt tccgcccatt ctccgcccca tggctgacta 3420
attttttta tttatgcaga ggccgaggcc gcctctgcct ctgagctatt ccagaagtag 3480
tgaggaggct tttttggagg cctaggcttt tgcaaaaagc tcccgggagc ttgtatatcc 3540
attttcggat ctgatcaaga gacaggatga ggatcgtttc gcatgattga acaagatgga 3600
ttgcacgcag gttctccggc cgcttgggtg gagaggctat tcggctatga ctgggcacaa 3660
cagacaatcg gctgctctga tgccgccgtg ttccggctgt cagcgcaggg gcgcccggtt 3720
ctttttgtca agaccgacct gtccggtgcc ctgaatgaac tgcaggacga ggcagcgcgg 3780
ctatcgtggc tggccacgac gggcgttcct tgcgcagctg tgctcgacgt tgtcactgaa 3840
gcgggaaggg actggctgct attgggcgaa gtgccggggc aggatctcct gtcatctcac 3900
cttgctcctg ccgagaaagt atccatcatg gctgatgcaa tgcggcggct gcatacgctt 3960
gatccggcta cctgcccatt cgaccaccaa gcgaaacatc gcatcgagcg agcacgtact 4020
cggatggaag ccggtcttgt cgatcaggat gatctggacg aagagcatca ggggctcgcg 4080
ccagccgaac tgttcgccag gctcaaggcg cgcatgcccg acggcgagga tctcgtcgtg 4140
acccatggcg atgcctgctt gccgaatatc atggtggaaa atggccgctt ttctggattc 4200
atcgactgtg gccggctggg tgtggcggac cgctatcagg acatagcgtt ggctacccgt 4260
gatattgctg aagagcttgg cggcgaatgg gctgaccgct tcctcgtgct ttacggtatc 4320
gccgctcccg attcgcagcg catcgccttc tatcgccttc ttgacgagtt cttctgagcg 4380
ggactctggg gttcgaaatg accgaccaag cgacgcccaa cctgccatca cgagatttcg 4440
attccaccgc cgccttctat gaaaggttgg gcttcggaat cgttttccgg gacgccggct 4500
ggatgatcct ccagcgcggg gatctcatgc tggagttctt cgcccacccc aacttgttta 4560
ttgcagctta taatggttac aaataaagca atagcatcac aaatttcaca aataaagcat 4620
ttttttcact gcattctagt tgtggtttgt ccaaactcat caatgtatct tatcatgtct 4680
gtataccgtc gacctctagc tagagcttgg cgtaatcatg gtcatagctg tttcctgtgt 4740
gaaattgtta tccgctcaca attccacaca acatacgagc cggaagcata aagtgtaaag 4800
cctggggtgc ctaatgagtg agctaactca cattaattgc gttgcgctca ctgcccgctt 4860
tccagtcggg aaacctgtcg tgccagctgc attaatgaat cggccaacgc gcggggagag 4920
gcggtttgcg gcgagcggta tcagctcact caaaggcggt aatacggtta tccacagaat 4980
caggggataa cgcaggaaag aacatgtgag caaaaggcca gcaaaaggcc aggaaccgta 5040
aaaaggccgc gttgctggcg tttttccata ggctccgccc ccctgacgag catcacaaaa 5100
atcgacgctc aagtcagagg tggcgaaacc cgacaggact ataaagatac caggcgtttc 5160
cccctggaag ctccctcgtg cgctctcctg ttccgaccct gccgcttacc ggatacctgt 5220
ccgcctttct cccttcggga agcgtggcgc tttctcaatg ctcacgctgt aggtatctca 5280
gttcggtgta ggtcgttcgc tccaagctgg gctgtgtgca cgaaccccc gttcagcccg 5340
accgctgcgc cttatccggt aactatcgtc ttgagtccaa cccggtaaga cacgacttat 5400
cgccactggc agcagccact ggtaacagga ttagcagagc gaggtatgta ggcggtgcta 5460
cagagttctt gaagtggtgg cctaactacg gctacactag aaggacagta tttggtatct 5520
gcgctctgct gaagccagtt accttcggaa aaagagttgg tagctcttga tccggcaaac 5580
aaaccaccgc tggtagcggt ggtttttttg tttgcaagca gcagattacg cgcagaaaaa 5640
aaggatctca agaagatcct ttgatctttt ctacggggtc tgacgctcag tggaacgaaa 5700

actcacgtta agggattttg gtcatgagat tatcaaaaag gatcttcacc tagatccttt 5760
taaattaaaa atgaagtttt aaatcaatct aaagtatata tgagtaaact tggtctgaca 5820
gttaccaatg cttaatcagt gaggcaccta tctcagcgat ctgtctattt cgttcatcca 5880
tagttgcctg actccccgtc gtgtagataa ctacgatacg ggagggctta ccatctggcc 5940
ccagtgctgc aatgataccg cgagacccac gctcaccggc tccagattta tcagcaataa 6000
accagccagc cggaagggcc gagcgcagaa gtggtcctgc aactttatcc gcctccatcc 6060
agtctattaa ttgttgccgg gaagctagag taagtagttc gccagttaat agtttgcgca 6120
acgttgttgc cattgctaca ggcatcgtgg tgtcacgctc gtcgtttggt atggcttcat 6180
tcagctccgg ttcccaacga tcaaggcgag ttacatgatc ccccatgttg tgcaaaaaag 6240
cggttagctc cttcggtcct ccgatcgttg tcagaagtaa gttggccgca gtgttatcac 6300
tcatggttat ggcagcactg cataattctc ttactgtcat gccatccgta agatgctttt 6360
ctgtgactgg tgagtactca accaagtcat tctgagaata gtgtatgcgg cgaccgagtt 6420
gctcttgccc ggcgtcaata cgggataata ccgcgccaca tagcagaact ttaaaagtgc 6480
tcatcattgg aaaacgttct tcggggcgaa aactctcaag gatcttaccg ctgttgagat 6540
ccagttcgat gtaacccact cgtgcaccca actgatcttc agcatctttt actttcacca 6600
gcgtttctgg gtgagcaaaa acaggaaggc aaaatgccgc aaaaaaggga ataagggcga 6660
cacggaaatg ttgaatactc atactcttcc tttttcaata ttattgaagc atttatcagg 6720
gttattgtct catgagcgga tacatatttg aatgtattta gaaaaataaa caaatagggg 6780
ttccgcgcac atttccccga aaagtgccac ctgacgtc 6818

<210> 8
<211> 6695
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7LBDBS

<400> 8
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgaccttа tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtg accgaagagg agggagaatg ttgaaacaca agcgccagag agatgatggg 1320
gagggcaggg gtgaagtggg gtctgctgga gacatgagag ctgccaacct ttggccaagc 1380
ccgctcatga tcaaacgctc taagaagaac agcctggcct tgtccctgac ggccgaccag 1440
atggtcagtg ccttgttgga tgctgagccc cccatactct attccgagta tgatcctacc 1500
agacccttca gtgaagcttc gatgatgggc ttactgacca acctggcaga cagggagctg 1560
gttcacatga tcaactgggc gaagagggtg ccaggctttg tggatttgac cctccatgat 1620
caggtccacc ttctagaatg tgcctggcta gagatcctga tgattggtct cgtctggcgc 1680
tccatggagc acccagggaa gctactgttt gctcctaact tgctcttgga caggaaccag 1740
ggaaaatgtg tagagggcat ggtggagatc ttcgacatgc tgctggctac atcatctcgg 1800
ttccgcatga tgaatctgca gggagaggag tttgtgtgcc tcaaatctat tattttgctt 1860
aattctggag tgtacacatt tctgtccagc accctgaagt ctctggaaga gaaggaccat 1920
atccaccgag tcctggacaa gatcacagac actttgatcc acctgatggc caaggcaggc 1980
ctgaccctgc agcagcagca ccagcggctg gcccagctcc tcctcatcct ctcccacatc 2040
aggcacatga gtaacaaagg catggagcat ctgtacagca tgaagtgcaa gaacgtggtg 2100

cccctctatg acctgctgct ggagatgctg gacgcccacc gcctacatgc gcccactagc 2160
cgtacgccgg ccgacgccct ggacgacttc gacctggaca tgctgccggc cgacgccctg 2220
gacgacttcg acctggacat gctgccggcc gacgccctgg acgacttcga cctggacatg 2280
ctgccggggt aactaagtaa gcggccgctc gagtctagag ggcccgttta aacccgctga 2340
tcagcctcga ctgtgccttc tagttgccag ccatctgttg tttgcccctc ccccgtgcct 2400
tccttgaccc tggaaggtgc cactcccact gtcctttcct aataaaatga ggaaattgca 2460
tcgcattgtc tgagtaggtg tcattctatt ctggggggtg gggtggggca ggacagcaag 2520
ggggaggatt gggaagacaa tagcaggcat gctggggatg cggtgggctc tatggcttct 2580
gaggcggaaa gaaccagctg gggctctagg gggtatcccc acgcgccctg tagcggcgca 2640
ttaagcgcgg cgggtgtggt ggttacgcgc agcgtgaccg ctacacttgc cagcgcccta 2700
gcgcccgctc ctttcgcttt cttcccttcc tttctcgcca cgttcgccgg ctttccccgt 2760
caagctctaa atcgggggcat ccctttaggg ttccgattta gtgctttacg gcacctcgac 2820
cccaaaaaac ttgattaggg tgatggttca cgtagtgggc catcgccctg atagacggtt 2880
tttcgccctt tgacgttgga gtccacgttc tttaatagtg gactcttgtt ccaaactgga 2940
acaacactca accctatctc ggtctattct tttgatttat aagggatttt ggggatttcg 3000
gcctattggt taaaaaatga gctgatttaa caaaaattta acgcgaatta attctgtgga 3060
atgtgtgtca gttagggtgt ggaaagtccc caggctcccc aggcaggcag aagtatgcaa 3120
agcatgcatc tcaattagtc agcaaccagg tgtggaaagt ccccaggctc cccagcaggc 3180
agaagtatgc aaagcatgca tctcaattag tcagcaacca tagtcccgcc cctaactccg 3240
cccatcccgc ccctaactcc gcccagttcc gcccattctc cgccccatgg ctgactaatt 3300
ttttttattt atgcagaggc cgaggccgcc tctgcctctg agctattcca gaagtagtga 3360
ggaggctttt ttggaggcct aggcttttgc aaaaagctcc cgggagcttg tatatccatt 3420
ttcggatctg atcaagagac aggatgagga tcgtttcgca tgattgaaca agatggattg 3480
cacgcaggtt ctccggccgc ttgggtggag aggctattcg gctatgactg ggcacaacag 3540
acaatcggct gctctgatgc cgccgtgttc cggctgtcag cgcaggggcg cccggttctt 3600
tttgtcaaga ccgacctgtc cggtgccctg aatgaactgc aggacgaggc agcgcggcta 3660
tcgtggctgg ccacgacggg cgttccttgc gcagctgtgc tcgacgttgt cactgaagcg 3720
ggaagggact ggctgctatt gggcgaagtg ccggggcagg atctcctgtc atctcacctt 3780
gctcctgccg agaaagtatc catcatggct gatgcaatgc ggcggctgca tacgcttgat 3840
ccggctacct gcccattcga ccaccaagcg aaacatcgca tcgagcgagc acgtactcgg 3900
atggaagccg gtcttgtcga tcaggatgat ctggacgaag agcatcaggg gctcgcgcca 3960
gccgaactgt tcgccaggct caaggcgcgc atgcccgacg gcgaggatct cgtcgtgacc 4020
catggcgatg cctgcttgcc gaatatcatg gtggaaaatg gccgcttttc tggattcatc 4080
gactgtggcc ggctgggtgt ggcggaccgc tatcaggaca tagcgttggc tacccgtgat 4140
attgctgaag agcttggcgg cgaatgggct gaccgcttcc tcgtgcttta cggtatcgcc 4200
gctcccgatt cgcagcgcat cgccttctat cgccttcttg acgagttctt ctgagcggga 4260
ctctggggtt cgaaatgacc gaccaagcga cgcccaacct gccatcacga gatttcgatt 4320
ccaccgccgc cttctatgaa aggttgggct tcggaatcgt tttccgggac gccggctgga 4380
tgatcctcca gcgcggggat ctcatgctgg agttcttcgc ccaccccaac ttgtttattg 4440
cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 4500
tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgta 4560
taccgtcgac ctctagctag agcttggcgt aatcatggtc atagctgttt cctgtgtgaa 4620
attgttatcc gctcacaatt ccacacaaca tacgagccgg aagcataaag tgtaaagcct 4680
ggggtgccta atgagtgagc taactcacat taattgcgtt gcgctcactg cccgctttcc 4740
agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg 4800
gtttgcggcg agcggtatca gctcactcaa aggcggtaat acggttatcc acagaatcag 4860
gggataacgc aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa 4920
aggccgcgtt gctggcgttt ttccataggc tccgcccccc tgacgagcat cacaaaaatc 4980
gacgctcaag tcagaggtgg cgaaacccga caggactata aagataccag gcgtttcccc 5040
ctggaagctc cctcgtgcgc tctcctgttc cgaccctgcc gcttaccgga tacctgtccg 5100
cctttctccc ttcgggaagc gtggcgcttt ctcaatgctc acgctgtagg tatctcagtt 5160
cggtgtaggt cgttcgctcc aagctgggct gtgtgcacga accccccgtt cagcccgacc 5220
gctgcgcctt atccggtaac tatcgtcttg agtccaaccc ggtaagacac gacttatcgc 5280
cactggcagc agccactggt aacaggatta gcagagcgag gtatgtaggc ggtgctacag 5340
agttcttgaa gtggtggcct aactacggct acactagaag gacagtattt ggtatctgcg 5400
ctctgctgaa gccagttacc ttcggaaaaa gagttggtag ctcttgatcc ggcaaacaaa 5460
ccaccgctgg tagcggtggt ttttttgttt gcaagcagca gattacgcgc agaaaaaaag 5520
gatctcaaga agatcctttg atcttttcta cggggtctga cgctcagtgg aacgaaaact 5580
cacgttaagg gattttggtc atgagattat caaaaaggat cttcacctag atccttttaa 5640
attaaaaatg aagttttaaa tcaatctaaa gtatatatga gtaaacttgg tctgacagtt 5700
accaatgctt aatcagtgag gcacctatct cagcgatctg tctatttcgt tcatccatag 5760
ttgcctgact ccccgtcgtg tagataacta cgatacggga gggcttacca tctggcccca 5820
gtgctgcaat gataccgcga gacccacgct caccggctcc agatttatca gcaataaacc 5880
agccagccgg aagggccgag cgcagaagtg gtcctgcaac tttatccgcc tccatccagt 5940
ctattaattg ttgccgggaa gctagagtaa gtagttcgcc agttaatagt ttgcgcaacg 6000
ttgttgccat tgctacaggc atcgtggtgt cacgctcgtc gtttggtatg gcttcattca 6060
gctccggttc ccaacgatca aggcgagtta catgatcccc catgttgtgc aaaaaagcgg 6120

ttagctcctt cggtcctccg atcgttgtca gaagtaagtt ggccgcagtg ttatcactca 6180
tggttatggc agcactgcat aattctctta ctgtcatgcc atccgtaaga tgcttttctg 6240
tgactggtga gtactcaacc aagtcattct gagaatagtg tatgcggcga ccgagttgct 6300
cttgcccggc gtcaatacgg gataataccg cgccacatag cagaacttta aaagtgctca 6360
tcattggaaa acgttcttcg gggcgaaaac tctcaaggat cttaccgctg ttgagatcca 6420
gttcgatgta acccactcgt gcacccaact gatcttcagc atcttttact ttcaccagcg 6480
tttctgggtg agcaaaaaca ggaaggcaaa atgccgcaaa aaagggaata agggcgacac 6540
ggaaatgttg aatactcata ctcttccttt ttcaatatta ttgaagcatt tatcagggtt 6600
attgtctcat gagcggatac atatttgaat gtatttagaa aaataaacaa atagggggttc 6660
cgcgcacatt tccccgaaaa gtgccacctg acgtc 6695

<210> 9
<211> 6956
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7LBDCL

<400> 9
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagta gtattcaagg acataacgac tatatgtgtc cagccaccaa ccagtgcacc 1320
attgataaaa acaggaggaa gagctgccag gcctgccggc tccgcaaatg ctacgaagtg 1380
ggaatgatga aaggtgggat acgaaaagac cgaagaggag ggagaatgtt gaaacacaag 1440
cgccagagag atgatgggga gggcaggggt gaagtggggt ctgctggaga catgagagct 1500
gccaaccttt ggccaagccc gctcatgatc aaacgctcta agaagaacag cctggccttg 1560
tccctgacgg ccgaccagat ggtcagtgcc ttgttggatg ctgagccccc catactctat 1620
tccgagtatg atcctaccag acccttcagt gaagcttcga tgatgggctt actgaccaac 1680
ctggcagaca gggagctggt tcacatgatc aactgggcga agagggtgcc aggctttgtg 1740
gatttgaccc tccatgatca ggtccacctt ctagaatgtg cctggctaga gatcctgatg 1800
attggtctcg tctggcgctc catggagcac ccagggaagc tactgtttgc tcctaacttg 1860
ctcttggaca ggaaccaggg aaaatgtgta gagggcatgg tggagatctt cgacatgctg 1920
ctggctacat catctcggtt ccgcatgatg aatctgcagg gagaggagtt tgtgtgcctc 1980
aaatctatta ttttgcttaa ttctggagtg tacacatttc tgtccagcac cctgaagtct 2040
ctggaagaga aggaccatat ccaccgagtc ctggacaaga tcacagacac tttgatccac 2100
ctgatggcca aggcaggcct gaccctgcag cagcagcacc agcggctggc ccagctcctc 2160
ctcatcctct cccacatcag gcacatgagt aacaaaggca tggagcatct gtacagcatg 2220
aagtgcaaga acgtggtgcc cctctatgac ctgctgctgg agatgctgga cgcccaccgc 2280
ctacatgcgc ccactagccg tggaggggca tccgtggagg agacggacca aagccacttg 2340
gccactgcgg gctctacttc atcgcattcc ttgcaaaagt attacatcac gggggaggca 2400
gagggtttcc ctgccacagt ccgtacgccg gccgacgccc tggacgactt cgacctggac 2460
atgctgccgg ccgacgccct ggacgacttc gacctggaca tgctgccggc cgacgccctg 2520
gacgacttcg acctggacat gctgccgggg taactaagta agcggccgct cgagtctaga 2580
gggcccgttt aaacccgctg atcagcctcg actgtgcctt ctagttgcca gccatctgtt 2640

gtttgcccct ccccgtgcc ttccttgacc ctggaaggtg ccactcccac tgtcctttcc 2700
taataaaatg aggaaattgc atcgcattgt ctgagtaggt gtcattctat tctgggggt 2760
ggggtggggc aggacagcaa gggggaggat tgggaagaca atagcaggca tgctggggat 2820
gcggtgggct ctatggcttc tgaggcggaa agaaccagct ggggctctag ggggtatccc 2880
cacgcgccct gtagcggcgc attaagcgcg gcgggtgtgg tggttacgcg cagcgtgacc 2940
gctacacttg ccagcgccct agcgcccgct cctttcgctt tcttcccttc ctttctcgcc 3000
acgttcgccg gctttccccg tcaagctcta aatcggggca tccctttagg gttccgattt 3060
agtgctttac ggcacctcga ccccaaaaaa cttgattagg gtgatggttc acgtagtggg 3120
ccatcgccct gatagacggt ttttcgccct ttgacgttgg agtccacgtt ctttaatagt 3180
ggactcttgt tccaaactgg aacaacactc aaccctatct cggtctattc ttttgattta 3240
taagggattt tggggatttc ggcctattgg ttaaaaaatg agctgattta acaaaaattt 3300
aacgcgaatt aattctgtgg aatgtgtgtc agttagggtg tggaaagtcc ccaggctccc 3360
caggcaggca gaagtatgca aagcatgcat ctcaattagt cagcaaccag gtgtggaaag 3420
tccccaggct ccccagcagg cagaagtatg caaagcatgc atctcaatta gtcagcaacc 3480
atagtcccgc ccctaactcc gcccatcccg cccctaactc cgcccagttc cgcccattct 3540
ccgccccatg gctgactaat tttttttatt tatgcagagg ccgaggccgc ctctgcctct 3600
gagctattcc agaagtagtg aggaggcttt tttggaggcc taggcttttg caaaaagctc 3660
ccgggagctt gtatatccat tttcggatct gatcaagaga caggatgagg atcgtttcgc 3720
atgattgaac aagatggatt gcacgcaggt tctccggccg cttgggtgga gaggctattc 3780
ggctatgact gggcacaaca gacaatcggc tgctctgatg ccgccgtgtt ccggctgtca 3840
gcgcaggggc gcccggttct ttttgtcaag accgacctgt ccggtgccct gaatgaactg 3900
caggacgagg cagcgcggct atcgtggctg gccacgacgg gcgttccttg cgcagctgtg 3960
ctcgacgttg tcactgaagc gggaagggac tggctgctat tgggcgaagt gccggggcag 4020
gatctcctgt catctcacct tgctcctgcc gagaaagtat ccatcatggc tgatgcaatg 4080
cggcggctgc atacgcttga tccggctacc tgcccattcg accaccaagc gaaacatcgc 4140
atcgagcgag cacgtactcg gatggaagcc ggtcttgtcg atcaggatga tctggacgaa 4200
gagcatcagg ggctcgcgcc agccgaactg ttcgccaggc tcaaggcgcg catgcccgac 4260
ggcgaggatc tcgtcgtgac ccatggcgat gcctgcttgc cgaatatcat ggtggaaaat 4320
ggccgctttt ctggattcat cgactgtggc cggctgggtg tggcggaccg ctatcaggac 4380
atagcgttgg ctacccgtga tattgctgaa gagcttggcg gcgaatgggc tgaccgcttc 4440
ctcgtgcttt acggtatcgc cgctcccgat tcgcagcgca tcgccttcta tcgccttctt 4500
gacgagttct tctgagcggg actctggggt tcgaaatgac cgaccaagcg acgcccaacc 4560
tgccatcacg agatttcgat tccaccgccg ccttctatga aaggttgggc ttcggaatcg 4620
ttttccggga cgccggctgg atgatcctcc agcgcgggga tctcatgctg gagttcttcg 4680
cccaccccaa cttgtttatt gcagcttata atggttacaa ataaagcaat agcatcacaa 4740
atttcacaaa taaagcattt ttttcactgc attctagttg tggtttgtcc aaactcatca 4800
atgtatctta tcatgtctgt ataccgtcga cctctagcta gagcttggcg taatcatggt 4860
catagctgtt tcctgtgtga aattgttatc cgctcacaat tccacacaac atacgagccg 4920
gaagcataaa gtgtaaagcc tggggtgcct aatgagtgag ctaactcaca ttaattgcgt 4980
tgcgctcact gcccgctttc cagtcgggaa acctgtcgtg ccagctgcat taatgaatcg 5040
gccaacgcgc ggggagaggc ggtttgcggc gagcggtatc agctcactca aaggcggtaa 5100
tacggttatc cacagaatca ggggataacg caggaaagaa catgtgagca aaaggccagc 5160
aaaaggccag gaaccgtaaa aaggccgcgt tgctggcgtt tttccatagg ctccgccccc 5220
ctgacgagca tcacaaaaat cgacgctcaa gtcagaggtg gcgaaacccg acaggactat 5280
aaagatacca ggcgtttccc cctggaagct ccctcgtgcg ctctcctgtt ccgaccctgc 5340
cgcttaccgg atacctgtcc gcctttctcc cttcgggaag cgtggcgctt tctcaatgct 5400
cacgctgtag gtatctcagt tcggtgtagg tcgttcgctc caagctgggc tgtgtgcacg 5460
aaccccccgt tcagcccgac cgctgcgcct tatccggtaa ctatcgtctt gagtccaacc 5520
cggtaagaca cgacttatcg ccactggcag cagccactgg taacaggatt agcagagcga 5580
ggtatgtagg cggtgctaca gagttcttga agtggtggcc taactacggc tacactagaa 5640
ggacagtatt tggtatctgc gctctgctga agccagttac cttcggaaaa agagttggta 5700
gctcttgatc cggcaaacaa accaccgctg gtagcggtgg tttttttgtt tgcaagcagc 5760
agattacgcg cagaaaaaaa ggatctcaag aagatccttt gatcttttct acggggtctg 5820
acgctcagtg gaacgaaaac tcacgttaag ggattttggt catgagatta tcaaaaagga 5880
tcttcaccta gatcctttta aattaaaaat gaagttttaa atcaatctaa agtatatatg 5940
agtaaacttg gtctgacagt taccaatgct taatcagtga ggcacctatc tcagcgatct 6000
gtctatttcg ttcatccata gttgcctgac tccccgtcgt gtagataact acgatacggg 6060
agggcttacc atctggcccc agtgctgcaa tgataccgcg agacccacgc tcaccggctc 6120
cagatttatc agcaataaac cagccagccg gaagggccga gcgcagaagt ggtcctgcaa 6180
ctttatccgc ctccatccag tctattaatt gttgccggga agctagagta agtagttcgc 6240
cagttaatag tttgcgcaac gttgttgcca ttgctacagg catcgtggtg tcacgctcgt 6300
cgtttggtat ggcttcattc agctccggtt cccaacgatc aaggcgagtt acatgatccc 6360
ccatgttgtg caaaaaagcg gttagctcct tcggtcctcc gatcgttgtc agaagtaagt 6420
tggccgcagt gttatcactc atggttatgg cagcactgca taattctctt actgtcatgc 6480
catccgtaag atgcttttct gtgactggtg agtactcaac caagtcattc tgagaatagt 6540
gtatgcggcg accgagttgc tcttgcccgg cgtcaatacg ggataatacc gcgccacata 6600
gcagaacttt aaaagtgctc atcattggaa aacgttcttc ggggcgaaaa ctctcaagga 6660

tcttaccgct gttgagatcc agttcgatgt aacccactcg tgcacccaac tgatcttcag 6720
catcttttac tttcaccagc gtttctgggt gagcaaaaac aggaaggcaa aatgccgcaa 6780
aaaagggaat aagggcgaca cggaaatgtt gaatactcat actcttcctt tttcaatatt 6840
attgaagcat ttatcagggt tattgtctca tgagcggata catatttgaa tgtatttaga 6900
aaaataaaca aatagggggtt ccgcgcacat ttccccgaaa agtgccacct gacgtc 6956

<210> 10
<211> 6833
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
C7LBDCS

<400> 10
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagta gtattcaagg acataacgac tatatgtgtc cagccaccaa ccagtgcacc 1320
attgataaaa acaggaggaa gagctgccag gcctgccggc tccgcaaatg ctacgaagtg 1380
ggaatgatga aaggtgggat acgaaaagac cgaagaggag ggagaatgtt gaaacacaag 1440
cgccagagag atgatgggga gggcaggggt gaagtggggt ctgctggaga catgagagct 1500
gccaaccttt ggccaagccc gctcatgatc aaacgctcta agaagaacag cctggccttg 1560
tccctgacgg ccgaccagat ggtcagtgcc ttgttggatg ctgagccccc catactctat 1620
tccgagtatg atcctaccag acccttcagt gaagcttcga tgatgggctt actgaccaac 1680
ctggcagaca gggagctggt tcacatgatc aactgggcga agagggtgcc aggctttgtg 1740
gatttgaccc tccatgatca ggtccacctt ctagaatgtg cctggctaga gatcctgatg 1800
attggtctcg tctggcgctc catggagcac ccagggaagc tactgtttgc tcctaacttg 1860
ctcttggaca ggaaccaggg aaaatgtgta gagggcatgg tggagatctt cgacatgctg 1920
ctggctacat catctcggtt ccgcatgatg aatctgcagg gagaggagtt tgtgtgcctc 1980
aaatctatta ttttgcttaa ttctggagtg tacacatttc tgtccagcac cctgaagtct 2040
ctggaagaga aggaccatat ccaccgagtc ctggacaaga tcacagacac tttgatccac 2100
ctgatggcca aggcaggcct gaccctgcag cagcagcacc agcggctggc ccagctcctc 2160
ctcatcctct cccacatcag gcacatgagt aacaaaggca tggagcatct gtacagcatg 2220
aagtgcaaga acgtggtgcc cctctatgac ctgctgctgg agatgctgga cgcccaccgc 2280
ctacatgcgc ccactagccg tacgccggcc gacgccctgg acgacttcga cctggacatg 2340
ctgccggccg acgccctgga cgacttcgac ctggacatgc tgccggccga cgccctggac 2400
gacttcgacc tggacatgct gccggggtaa ctaagtaagc ggccgctcga gtctagaggg 2460
cccgtttaaa cccgctgatc agcctcgact gtgccttcta gttgccagcc atctgttgtt 2520
tgcccctccc ccgtgccttc cttgaccctg gaaggtgcca ctcccactgt cctttcctaa 2580
taaaatgagg aaattgcatc gcattgtctg agtaggtgtc attctattct gggggggtggg 2640
gtggggcagg acagcaaggg ggaggattgg gaagacaata gcaggcatgc tggggatgcg 2700
gtgggctcta tggcttctga ggcggaaaga accagctggg gctctagggg gtatccccac 2760
gcgccctgta gcggcgcatt aagcgcggcg ggtgtggtgg ttacgcgcag cgtgaccgct 2820
acacttgcca gcgccctagc gcccgctcct ttcgctttct tcccttcctt tctcgccacg 2880
ttcgccggct ttccccgtca agctctaaat cggggcatcc ctttagggtt ccgatttagt 2940

gctttacggc acctcgaccc caaaaaactt gattagggtg atggttcacg tagtgggcca 3000
tcgccctgat agacggtttt tcgccctttg acgttggagt ccacgttctt taatagtgga 3060
ctcttgttcc aaactggaac aacactcaac cctatctcgg tctattcttt tgatttataa 3120
gggattttgg ggatttcggc ctattggtta aaaaatgagc tgatttaaca aaaatttaac 3180
gcgaattaat tctgtggaat gtgtgtcagt tagggtgtgg aaagtcccca ggctccccag 3240
gcaggcagaa gtatgcaaag catgcatctc aattagtcag caaccaggtg tggaaagtcc 3300
ccaggctccc cagcaggcag aagtatgcaa agcatgcatc tcaattagtc agcaaccata 3360
gtcccgcccc taactccgcc catcccgccc ctaactccgc ccagttccgc ccattctccg 3420
ccccatggct gactaatttt ttttatttat gcagaggccg aggccgcctc tgcctctgag 3480
ctattccaga agtagtgagg aggcttttt ggaggcctag gcttttgcaa aaagctcccg 3540
ggagcttgta tatccatttt cggatctgat caagagacag gatgaggatc gtttcgcatg 3600
attgaacaag atggattgca cgcaggttct ccggccgctt gggtggagag gctattcggc 3660
tatgactggg cacaacagac aatcggctgc tctgatgccg ccgtgttccg gctgtcagcg 3720
caggggcgcc cggttctttt tgtcaagacc gacctgtccg gtgccctgaa tgaactgcag 3780
gacgaggcag cgcggctatc gtggctggcc acgacgggcg ttccttgcgc agctgtgctc 3840
gacgttgtca ctgaagcggg aagggactgg ctgctattgg gcgaagtgcc ggggcaggat 3900
ctcctgtcat ctcaccttgc tcctgccgag aaagtatcca tcatggctga tgcaatgcgg 3960
cggctgcata cgcttgatcc ggctacctgc ccattcgacc accaagcgaa acatcgcatc 4020
gagcgagcac gtactcggat ggaagccggt cttgtcgatc aggatgatct ggacgaagag 4080
catcaggggc tcgcgccagc cgaactgttc gccaggctca aggcgcgcat gcccgacggc 4140
gaggatctcg tcgtgaccca tggcgatgcc tgcttgccga atatcatggt ggaaaatggc 4200
cgcttttctg gattcatcga ctgtggccgg ctgggtgtgg cggaccgcta tcaggacata 4260
gcgttggcta cccgtgatat tgctgaagag cttggcggcg aatgggctga ccgcttcctc 4320
gtgctttacg gtatcgccgc tcccgattcg cagcgcatcg ccttctatcg ccttcttgac 4380
gagttcttct gagcgggact ctggggttcg aaatgaccga ccaagcgacg cccaacctgc 4440
catcacgaga tttcgattcc accgccgcct tctatgaaag gttgggcttc ggaatcgttt 4500
tccgggacgc cggctggatg atcctccagc gcggggatct catgctggag ttcttcgccc 4560
accccaactt gtttattgca gcttataatg gttacaaata aagcaatagc atcacaaatt 4620
tcacaaataa agcatttttt tcactgcatt ctagttgtgg tttgtccaaa ctcatcaatg 4680
tatcttatca tgtctgtata ccgtcgacct ctagctagag cttggcgtaa tcatggtcat 4740
agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa 4800
gcataaagtg taaagcctgg ggtgcctaat gagtgagcta actcacatta attgcgttgc 4860
gctcactgcc cgctttccag tcgggaaacc tgtcgtgcca gctgcattaa tgaatcggcc 4920
aacgcgcggg gagaggcggt ttgcggcgag cggtatcagc tcactcaaag gcggtaatac 4980
ggttatccac agaatcaggg gataacgcag gaaagaacat gtgagcaaaa ggccagcaaa 5040
aggccaggaa ccgtaaaaag gccgcgttgc tggcgttttt ccataggctc cgccccctg 5100
acgagcatca caaaaatcga cgctcaagtc agaggtggcg aaacccgaca ggactataaa 5160
gataccaggc gtttcccccct ggaagctccc tcgtgcgctc tcctgttccg accctgccgc 5220
ttaccggata cctgtccgcc tttctccctt cgggaagcgt ggcgctttct caatgctcac 5280
gctgtaggta tctcagttcg gtgtaggtcg ttcgctccaa gctgggctgt gtgcacgaac 5340
ccccgttca gcccgaccgc tgcgccttat ccggtaacta tcgtcttgag tccaacccgg 5400
taagacacga cttatcgcca ctggcagcag ccactggtaa caggattagc agagcgaggt 5460
atgtaggcgg tgctacagag ttcttgaagt ggtggcctaa ctacggctac actagaagga 5520
cagtatttgg tatctgcgct ctgctgaagc cagttacctt cggaaaaaga gttggtagct 5580
cttgatccgg caaacaaacc accgctggta gcggtggttt ttttgtttgc aagcagcaga 5640
ttacgcgcag aaaaaaagga tctcaagaag atcctttgat cttttctacg gggtctgacg 5700
ctcagtggaa cgaaaactca cgttaaggga ttttggtcat gagattatca aaaaggatct 5760
tcacctagat ccttttaaat taaaaatgaa gttttaaatc aatctaaagt atatatgagt 5820
aaacttggtc tgacagttac caatgcttaa tcagtgaggc acctatctca gcgatctgtc 5880
tatttcgttc atccatagtt gcctgactcc ccgtcgtgta gataactacg atacgggagg 5940
gcttaccatc tggccccagt gctgcaatga taccgcgaga cccacgctca ccggctccag 6000
atttatcagc aataaaccag ccagccggaa gggccgagcg cagaagtggt cctgcaactt 6060
tatccgcctc catccagtct attaattgtt gccgggaagc tagagtaagt agttcgccag 6120
ttaatagttt gcgcaacgtt gttgccattg ctacaggcat cgtggtgtca cgctcgtcgt 6180
ttggtatggc ttcattcagc tccggttccc aacgatcaag gcgagttaca tgatccccca 6240
tgttgtgcaa aaaagcggtt agctccttcg gtcctccgat cgttgtcaga agtaagttgg 6300
ccgcagtgtt atcactcatg gttatggcag cactgcataa ttctcttact gtcatgccat 6360
ccgtaagatg cttttctgtg actggtgagt actcaaccaa gtcattctga gaatagtgta 6420
tgcggcgacc gagttgctct tgcccggcgt caatacggga taataccgcg ccacatagca 6480
gaactttaaa agtgctcatc attggaaaac gttcttcggg gcgaaaactc tcaaggatct 6540
taccgctgtt gagatccagt tcgatgtaac ccactcgtgc acccaactga tcttcagcat 6600
cttttacttt caccagcgtt tctgggtgag caaaaacagg aaggcaaaat gccgcaaaaa 6660
agggaataag ggcgacacgg aaatgttgaa tactcatact cttccttttt caatattatt 6720
gaagcattta tcagggttat tgtctcatga gcggatacat atttgaatgt atttagaaaa 6780
ataaacaaat aggggttccg cgcacatttc cccgaaaagt gccacctgac gtc 6833

<210> 11

<211> 6567
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
E2CLBDAS

<400> 11
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttagat ctatggccca ggcggccctc gagcccgggg agaagcccta 960
tgcttgtccg gaatgtggta agtccttctc tcagagctct cacctggtgc gccaccagcg 1020
tacccacacg ggtgaaaaac cgtataaatg cccagagtgc ggcaaatctt ttagtgactg 1080
ccgcgacctt gctcgccatc aacgcactca tactggcgag aagccataca aatgtccaga 1140
atgtggcaag tctttcagcc gctctgacaa gctggtgcgt caccaacgta ctcacaccgg 1200
taaaaaaact agttctgctg gagacatgag agctgccaac ctttggccaa gcccgctcat 1260
gatcaaacgc tctaagaaga acagcctggc cttgtccctg acggccgacc agatggtcag 1320
tgccttgttg gatgctgagc cccccatact ctattccgag tatgatccta ccagaccctt 1380
cagtgaagct tcgatgatgg gcttactgac caacctggca gacagggagc tggttcacat 1440
gatcaactgg gcgaagaggg tgccaggctt tgtggatttg accctccatg atcaggtcca 1500
ccttctagaa tgtgcctggc tagagatcct gatgattggt ctcgtctggc gctccatgga 1560
gcacccaggg aagctactgt ttgctcctaa cttgctcttg gacaggaacc agggaaaatg 1620
tgtagagggc atggtggaga tcttcgacat gctgctggct acatcatctc ggttccgcat 1680
gatgaatctg cagggagagg agtttgtgtg cctcaaatct attattttgc ttaattctgg 1740
agtgtacaca tttctgtcca gcaccctgaa gtctctggaa gagaaggacc atatccaccg 1800
agtcctggac aagatcacag acactttgat ccacctgatg gccaaggcag gcctgaccct 1860
gcagcagcag caccagcggc tggcccagct cctcctcatc ctctcccaca tcaggcacat 1920
gagtaacaaa ggcatggagc atctgtacag catgaagtgc aagaacgtgg tgcccctcta 1980
tgacctgctg ctggagatgc tggacgccca ccgcctacat gcgcccacta gccgtacgcc 2040
ggccgacgcc ctggacgact tcgacctgga catgctgccg gccgacgccc tggacgactt 2100
cgacctggac atgctgccgg ccgacgccct ggacgacttc gacctggaca tgctgccggg 2160
gtaactaagt aagcggccgc tcgagtctag agggcccgtt taaacccgct gatcagcctc 2220
gactgtgcct tctagttgcc agccatctgt tgtttgcccc tcccccgtgc cttccttgac 2280
cctggaaggt gccactccca ctgtcctttc ctaataaaat gaggaaattg catcgcattg 2340
tctgagtagg tgtcattcta ttctgggggg tggggtgggg caggacagca agggggagga 2400
ttgggaagac aatagcaggc atgctgggga tgcggtgggc tctatggctt ctgaggcgga 2460
aagaaccagc tggggctcta gggggtatcc ccacgcgccc tgtagcggcg cattaagcgc 2520
ggcgggtgtg gtggttacgc gcagcgtgac cgctacactt gccagcgccc tagcgcccgc 2580
tcctttcgct ttcttccctt cctttctcgc cacgttcgcc ggctttcccc gtcaagctct 2640
aaatcggggc atcccttag ggttccgatt tagtgcttta cggcacctcg accccaaaaa 2700
acttgattag ggtgatggtt cacgtagtgg gccatcgccc tgatagacgg tttttcgccc 2760
tttgacgttg gagtccacgt tctttaatag tggactcttg ttccaaactg gaacaacact 2820
caaccctatc tcggtctatt cttttgattt ataagggatt ttggggattt cggcctattg 2880
gttaaaaaat gagctgattt aacaaaaatt taacgcgaat taattctgtg gaatgtgtgt 2940
cagttagggt gtggaaagtc cccaggctcc ccaggcaggc agaagtatgc aaagcatgca 3000
tctcaattag tcagcaacca ggtgtggaaa gtccccaggc tccccagcag gcagaagtat 3060
gcaaagcatg catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 3120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 3180
ttatgcagag gccgaggccg cctctgcctc tgagctattc cagaagtagt gaggaggctt 3240
ttttggaggc ctaggctttt gcaaaaagct cccgggagct tgtatatcca ttttcggatc 3300
tgatcaagag acaggatgag gatcgtttcg catgattgaa caagatggat tgcacgcagg 3360

ttctccggcc gcttgggtgg agaggctatt cggctatgac tgggcacaac agacaatcgg 3420
ctgctctgat gccgccgtgt tccggctgtc agcgcagggg cgcccggttc tttttgtcaa 3480
gaccgacctg tccggtgccc tgaatgaact gcaggacgag gcagcgcggc tatcgtggct 3540
ggccacgacg ggcgttcctt gcgcagctgt gctcgacgtt gtcactgaag cgggaaggga 3600
ctggctgcta ttgggcgaag tgccggggca ggatctcctg tcatctcacc ttgctcctgc 3660
cgagaaagta tccatcatgg ctgatgcaat gcggcggctg catacgcttg atccggctac 3720
ctgcccattc gaccaccaag cgaaacatcg catcgagcga gcacgtactc ggatggaagc 3780
cggtcttgtc gatcaggatg atctggacga agagcatcag gggctcgcgc cagccgaact 3840
gttcgccagg ctcaaggcgc gcatgcccga cggcgaggat ctcgtcgtga cccatggcga 3900
tgcctgcttg ccgaatatca tggtggaaaa tggccgcttt tctggattca tcgactgtgg 3960
ccggctgggt gtggcggacc gctatcagga catagcgttg gctacccgtg atattgctga 4020
agagcttggc ggcgaatggg ctgaccgctt cctcgtgctt tacggtatcg ccgctcccga 4080
ttcgcagcgc atcgccttct atcgccttct tgacgagttc ttctgagcgg gactctgggg 4140
ttcgaaatga ccgaccaagc gacgcccaac ctgccatcac gagatttcga ttccaccgcc 4200
gccttctatg aaaggttggg cttcggaatc gttttccggg acgccggctg gatgatcctc 4260
cagcgcgggg atctcatgct ggagttcttc gcccacccca acttgtttat tgcagcttat 4320
aatggttaca aataaagcaa tagcatcaca aatttcacaa ataaagcatt tttttcactg 4380
cattctagtt gtggtttgtc caaactcatc aatgtatctt atcatgtctg tataccgtcg 4440
acctctagct agagcttggc gtaatcatgg tcatagctgt ttcctgtgtg aaattgttat 4500
ccgctcacaa ttccacacaa catacgagcc ggaagcataa agtgtaaagc ctggggtgcc 4560
taatgagtga gctaactcac attaattgcg ttgcgctcac tgcccgcttt ccagtcggga 4620
aacctgtcgt gccagctgca ttaatgaatc ggccaacgcg cggggagagg cggtttgcgg 4680
cgagcggtat cagctcactc aaaggcggta atacggttat ccacagaatc aggggataac 4740
gcaggaaaga acatgtgagc aaaaggccag caaaaggcca ggaaccgtaa aaaggccgcg 4800
ttgctggcgt ttttccatag gctccgcccc cctgacgagc atcacaaaaa tcgacgctca 4860
agtcagaggt ggcgaaaccc gacaggacta taaagatacc aggcgtttcc ccctggaagc 4920
tccctcgtgc gctctcctgt tccgaccctg ccgcttaccg gatacctgtc cgcctttctc 4980
ccttcgggaa gcgtggcgct ttctcaatgc tcacgctgta ggtatctcag ttcggtgtag 5040
gtcgttcgct ccaagctggg ctgtgtgcac gaaccccccg ttcagcccga ccgctgcgcc 5100
ttatccggta actatcgtct tgagtccaac ccggtaagac acgacttatc gccactggca 5160
gcagccactg gtaacaggat tagcagagcg aggtatgtag gcggtgctac agagttcttg 5220
aagtggtggc ctaactacgg ctacactaga aggacagtat ttggtatctg cgctctgctg 5280
aagccagtta ccttcggaaa aagagttggt agctcttgat ccggcaaaca aaccaccgct 5340
ggtagcggtg gtttttttgt ttgcaagcag cagattacgc gcagaaaaaa aggatctcaa 5400
gaagatcctt tgatcttttc tacggggtct gacgctcagt ggaacgaaaa ctcacgttaa 5460
gggattttgg tcatgagatt atcaaaaagg atcttcacct agatcctttt aaattaaaaa 5520
tgaagtttta aatcaatcta aagtatatat gagtaaactt ggtctgacag ttaccaatgc 5580
ttaatcagtg aggcacctat ctcagcgatc tgtctatttc gttcatccat agttgcctga 5640
ctccccgtcg tgtagataac tacgatacgg gagggcttac catctggccc cagtgctgca 5700
atgataccgc gagacccacg ctcaccggct ccagatttat cagcaataaa ccagccagcc 5760
ggaagggccg agcgcagaag tggtcctgca actttatccg cctccatcca gtctattaat 5820
tgttgccggg aagctagagt aagtagttcg ccagttaata gtttgcgcaa cgttgttgcc 5880
attgctacag gcatcgtggt gtcacgctcg tcgtttggta tggcttcatt cagctccggt 5940
tcccaacgat caaggcgagt tacatgatcc cccatgttgt gcaaaaaagc ggttagctcc 6000
ttcggtcctc cgatcgttgt cagaagtaag ttggccgcag tgttatcact catggttatg 6060
gcagcactgc ataattctct tactgtcatg ccatccgtaa gatgcttttc tgtgactggt 6120
gagtactcaa ccaagtcatt ctgagaatag tgtatgcggc gaccgagttg ctcttgcccg 6180
gcgtcaatac gggataatac cgcgccacat agcagaactt taaaagtgct catcattgga 6240
aaacgttctt cggggcgaaa actctcaagg atcttaccgc tgttgagatc cagttcgatg 6300
taacccactc gtgcacccaa ctgatcttca gcatctttta ctttcaccag cgtttctggg 6360
tgagcaaaaa caggaaggca aaatgccgca aaaaagggaa taagggcgac acggaaatgt 6420
tgaatactca tactcttcct ttttcaatat tattgaagca tttatcaggg ttattgtctc 6480
atgagcggat acatatttga atgtatttag aaaaataaac aaataggggt tccgcgcaca 6540
tttccccgaa aagtgccacc tgacgtc 6567

<210> 12
<211> 6639
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
E2CLBDBS

<400> 12

gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgaccttа tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttagat ctatggccca ggcggccctc gagcccgggg agaagcccta 960
tgcttgtccg gaatgtggta agtccttctc tcagagctct cacctggtgc gccaccagcg 1020
tacccacacg ggtgaaaaac cgtataaatg cccagagtgc ggcaaatctt ttagtgactg 1080
ccgcgacctt gctcgccatc aacgcactca tactggcgag aagccataca aatgtccaga 1140
atgtggcaag tctttcagcc gctctgacaa gctggtgcgt caccaacgta ctcacaccgg 1200
taaaaaaact agtgaccgaa gaggagggag aatgttgaaa cacaagcgcc agagagatga 1260
tggggagggc aggggtgaag tggggtctgc tggagacatg agagctgcca acctttggcc 1320
aagcccgctc atgatcaaac gctctaagaa gaacagcctg gccttgtccc tgacggccga 1380
ccagatggtc agtgccttgt tggatgctga gccccccata ctctattccg agtatgatcc 1440
taccagaccc ttcagtgaag cttcgatgat gggcttactg accaacctgg cagacaggga 1500
gctggttcac atgatcaact gggcgaagag ggtgccaggc tttgtggatt tgaccctcca 1560
tgatcaggtc caccttctag aatgtgcctg gctagagatc ctgatgattg gtctcgtctg 1620
gcgctccatg gagcacccag ggaagctact gtttgctcct aacttgctct tggacaggaa 1680
ccagggaaaa tgtgtagagg gcatggtgga gatcttcgac atgctgctgg ctacatcatc 1740
tcggttccgc atgatgaatc tgcagggaga ggagtttgtg tgcctcaaat ctattatttt 1800
gcttaattct ggagtgtaca catttctgtc cagcaccctg aagtctctgg aagagaagga 1860
ccatatccac cgagtcctgg acaagatcac agacactttg atccacctga tggccaaggc 1920
aggcctgacc ctgcagcagc agcaccagcg gctggcccag ctcctcctca tcctctccca 1980
catcaggcac atgagtaaca aaggcatgga gcatctgtac agcatgaagt gcaagaacgt 2040
ggtgcccctc tatgacctgc tgctggagat gctggacgcc caccgcctac atgcgcccac 2100
tagccgtacg ccggccgacg ccctggacga cttcgacctg gacatgctgc cggccgacgc 2160
cctggacgac ttcgacctgg acatgctgcc ggccgacgcc ctggacgact tcgacctgga 2220
catgctgccg gggtaactaa gtaagcggcc gctcgagtct agagggcccg tttaaacccg 2280
ctgatcagcc tcgactgtgc cttctagttg ccagccatct gttgtttgcc cctcccccgt 2340
gccttccttg accctggaag gtgccactcc cactgtcctt tcctaataaa atgaggaaat 2400
tgcatcgcat tgtctgagta ggtgtcattc tattctgggg ggtggggtgg ggcaggacag 2460
caaggggag gattgggaag acaatagcag gcatgctggg gatgcggtgg gctctatggc 2520
ttctgaggcg gaaagaacca gctggggctc taggggtat ccccacgcgc cctgtagcgg 2580
cgcattaagc gcggcgggtg tggtggttac gcgcagcgtg accgctacac ttgccagcgc 2640
cctagcgccc gctcctttcg ctttcttccc ttcctttctc gccacgttcg ccggctttcc 2700
ccgtcaagct ctaaatcggg gcatcccttt agggttccga tttagtgctt tacggcacct 2760
cgaccccaaa aaacttgatt agggtgatgg ttcacgtagt gggccatcgc cctgatagac 2820
ggtttttcgc cctttgacgt tggagtccac gttctttaat agtggactct tgttccaaac 2880
tggaacaaca ctcaacccta tctcggtcta ttcttttgat ttataaggga ttttggggat 2940
ttcggcctat tggttaaaaa atgagctgat ttaacaaaaa tttaacgcga attaattctg 3000
tggaatgtgt gtcagttagg gtgtggaaag tccccaggct ccccaggcag gcagaagtat 3060
gcaaagcatg catctcaatt agtcagcaac caggtgtgga aagtccccag gctccccagc 3120
aggcagaagt atgcaaagca tgcatctcaa ttagtcagca accatagtcc cgcccctaac 3180
tccgcccatc ccgcccctaa ctccgcccag ttccgcccat tctccgcccc atggctgact 3240
aatttttttt atttatgcag aggccgaggc cgcctctgcc tctgagctat tccagaagta 3300
gtgaggaggc ttttttggag gcctaggctt ttgcaaaaag ctcccgggag cttgtatatc 3360
cattttcgga tctgatcaag agacaggatg aggatcgttt cgcatgattg aacaagatgg 3420
attgcacgca ggttctccgg ccgcttgggt ggagaggcta ttcggctatg actgggcaca 3480
acagacaatc ggctgctctg atgccgccgt gttccggctg tcagcgcagg ggcgcccggt 3540
tctttttgtc aagaccgacc tgtccggtgc cctgaatgaa ctgcaggacg aggcagcgcg 3600
gctatcgtgg ctggccacga cgggcgttcc ttgcgcagct gtgctcgacg ttgtcactga 3660
agcgggaagg gactggctgc tattgggcga agtgccgggg caggatctcc tgtcatctca 3720
ccttgctcct gccgagaaag tatccatcat ggctgatgca atgcggcggc tgcatacgct 3780
tgatccggct acctgcccat tcgaccacca agcgaaacat cgcatcgagc gagcacgtac 3840
tcggatggaa gccggtcttg tcgatcagga tgatctggac gaagagcatc aggggctcgc 3900
gccagccgaa ctgttcgcca ggctcaaggc gcgcatgccc gacggcgagg atctcgtcgt 3960
gacccatggc gatgcctgct tgccgaatat catggtggaa aatggccgct tttctggatt 4020

catcgactgt ggccggctgg gtgtggcgga ccgctatcag gacatagcgt tggctacccg 4080
tgatattgct gaagagcttg gcggcgaatg ggctgaccgc ttcctcgtgc tttacggtat 4140
cgccgctccc gattcgcagc gcatcgcctt ctatcgcctt cttgacgagt tcttctgagc 4200
gggactctgg ggttcgaaat gaccgaccaa gcgacgccca acctgccatc acgagatttc 4260
gattccaccg ccgccttcta tgaaaggttg ggcttcggaa tcgttttccg ggacgccggc 4320
tggatgatcc tccagcgcgg ggatctcatg ctggagttct tcgcccaccc caacttgttt 4380
attgcagctt ataatggtta caaataaagc aatagcatca caaatttcac aaataaagca 4440
ttttttcac tgcattctag ttgtggtttg tccaaactca tcaatgtatc ttatcatgtc 4500
tgtataccgt cgacctctag ctagagcttg gcgtaatcat ggtcatagct gtttcctgtg 4560
tgaaattgtt atccgctcac aattccacac aacatacgag ccggaagcat aaagtgtaaa 4620
gcctggggtg cctaatgagt gagctaactc acattaattg cgttgcgctc actgcccgct 4680
ttccagtcgg gaaacctgtc gtgccagctg cattaatgaa tcggccaacg cgcggggaga 4740
ggcggtttgc ggcgagcggt atcagctcac tcaaaggcgg taatacggtt atccacagaa 4800
tcaggggata acgcaggaaa gaacatgtga gcaaaaggcc agcaaaaggc caggaaccgt 4860
aaaaaggccg cgttgctggc gtttttccat aggctccgcc cccctgacga gcatcacaaa 4920
aatcgacgct caagtcagag gtggcgaaac ccgacaggac tataaagata ccaggcgttt 4980
cccccctggaa gctccctcgt gcgctctcct gttccgaccc tgccgcttac cggatacctg 5040
tccgcctttc tcccttcggg aagcgtggcg ctttctcaat gctcacgctg taggtatctc 5100
agttcggtgt aggtcgttcg ctccaagctg ggctgtgtgc acgaaccccc cgttcagccc 5160
gaccgctgcg ccttatccgg taactatcgt cttgagtcca acccggtaag acacgactta 5220
tcgccactgg cagcagccac tggtaacagg attagcagag cgaggtatgt aggcggtgct 5280
acagagttct tgaagtggtg gcctaactac ggctacacta gaaggacagt atttggtatc 5340
tgcgctctgc tgaagccagt taccttcgga aaaagagttg gtagctcttg atccggcaaa 5400
caaaccaccg ctggtagcgg tggttttttt gtttgcaagc agcagattac gcgcagaaaa 5460
aaaggatctc aagaagatcc tttgatcttt tctacggggt ctgacgctca gtggaacgaa 5520
aactcacgtt aagggatttt ggtcatgaga ttatcaaaaa ggatcttcac ctagatcctt 5580
ttaaattaaa aatgaagttt taaatcaatc taaagtatat atgagtaaac ttggtctgac 5640
agttaccaat gcttaatcag tgaggcacct atctcagcga tctgtctatt tcgttcatcc 5700
atagttgcct gactccccgt cgtgtagata actacgatac gggagggctt accatctggc 5760
cccagtgctg caatgatacc gcgagaccca cgctcaccgg ctccagattt atcagcaata 5820
aaccagccag ccggaagggc cgagcgcaga agtggtcctg caactttatc cgcctccatc 5880
cagtctatta attgttgccg ggaagctaga gtaagtagtt cgccagttaa tagtttgcgc 5940
aacgttgttg ccattgctac aggcatcgtg gtgtcacgct cgtcgtttgg tatggcttca 6000
ttcagctccg gttcccaacg atcaaggcga gttacatgat cccccatgtt gtgcaaaaaa 6060
gcggttagct ccttcggtcc tccgatcgtt gtcagaagta agttggccgc agtgttatca 6120
ctcatggtta tggcagcact gcataattct cttactgtca tgccatccgt aagatgcttt 6180
tctgtgactg gtgagtactc aaccaagtca ttctgagaat agtgtatgcg gcgaccgagt 6240
tgctcttgcc cggcgtcaat acgggataat accgcgccac atagcagaac tttaaaagtg 6300
ctcatcattg gaaaacgttc ttcggggcga aaactctcaa ggatcttacc gctgttgaga 6360
tccagttcga tgtaacccac tcgtgcaccc aactgatctt cagcatcttt tactttcacc 6420
agcgtttctg ggtgagcaaa aacaggaagg caaaatgccg caaaaaaggg aataagggcg 6480
acacggaaat gttgaatact catactcttc ctttttcaat attattgaag catttatcag 6540
ggttattgtc tcatgagcgg atacatattt gaatgtattt agaaaaataa acaaataggg 6600
gttccgcgca catttccccg aaaagtgcca cctgacgtc 6639

<210> 13
<211> 6801
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
LBDASNLSVP16

<400> 13
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600

tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtt ctgctggaga catgagagct gccaaccttt ggccaagccc gctcatgatc 1320
aaacgctcta agaagaacag cctggccttg tccctgacgg ccgaccagat ggtcagtgcc 1380
ttgttggatg ctgagccccc catactctat tccgagtatg atcctaccag acccttcagt 1440
gaagcttcga tgatgggctt actgaccaac ctggcagaca gggagctggt tcacatgatc 1500
aactgggcga agagggtgcc aggctttgtg gatttgaccc tccatgatca ggtccacctt 1560
ctagaatgtg cctggctaga gatcctgatg attggtctcg tctggcgctc catggagcac 1620
ccagggaagc tactgtttgc tcctaacttg ctcttggaca ggaaccaggg aaaatgtgta 1680
gagggcatgg tggagatctt cgacatgctg ctggctacat catctcggtt ccgcatgatg 1740
aatctgcagg gagaggagtt tgtgtgcctc aaatctatta ttttgcttaa ttctggagtg 1800
tacacatttc tgtccagcac cctgaagtct ctggaagaga aggaccatat ccaccgagtc 1860
ctggacaaga tcacagacac tttgatccac ctgatggcca aggcaggcct gaccctgcag 1920
cagcagcacc agcggctggc ccagctcctc ctcatcctct cccacatcag gcacatgagt 1980
aacaaaggca tggagcatct gtacagcatg aagtgcaaga acgtggtgcc cctctatgac 2040
ctgctgctgg agatgctgga cgcccaccgc ctacatgcgc ccactagccg tacgccgaaa 2100
aagaaacgca aagttgggcg cgccggcgct cccccgaccg atgtcagcct gggggacgag 2160
ctccacttag acggcgagga cgtggcgatg gcgcatgccg acgcgctaga cgatttcgat 2220
ctggacatgt tgggggacgg ggattccccg ggtccgggat ttacccccca cgactccgcc 2280
ccctacggcg ctctggatat ggccgacttc gagtttgagc agatgtttac cgatgccctt 2340
ggaattgacg agtacggttt aattaactac ccgtacgacg ttccggacta cgcttcttga 2400
gaattcgcgg ccgctcgagt ctagagggcc cgtttaaacc cgctgatcag cctcgactgt 2460
gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct tgaccctgga 2520
aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc attgtctgag 2580
taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg aggattggga 2640
agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg cggaaagaac 2700
cagctggggc tctaggggtt atccccacgc gccctgtagc ggcgcattaa gcgcggcggg 2760
tgtggtggtt acgcgcagcg tgaccgctac acttgccagc gccctagcgc ccgctccttt 2820
cgctttcttc ccttcctttc tcgccacgtt cgccggcttt ccccgtcaag ctctaaatcg 2880
gggcatccct ttagggttcc gatttagtgc tttacggcac ctcgacccca aaaaacttga 2940
ttagggtgat ggttcacgta gtgggccatc gccctgatag acggtttttc gccctttgac 3000
gttggagtcc acgttcttta atagtggact cttgttccaa actggaacaa cactcaaccc 3060
tatctcggtc tattcttttg atttataagg gattttgggg atttcggcct attggttaaa 3120
aaatgagctg atttaacaaa aatttaacgc gaattaattc tgtggaatgt gtgtcagtta 3180
gggtgtggaa agtccccagg ctccccaggc aggcagaagt atgcaaagca tgcatctcaa 3240
ttagtcagca accaggtgtg gaaagtcccc aggctcccca gcaggcagaa gtatgcaaag 3300
catgcatctc aattagtcag caaccatagt cccgccccta actccgccca tcccgcccct 3360
aactccgccc agttccgccc attctccgcc ccatggctga ctaatttttt ttatttatgc 3420
agaggccgag gccgcctctg cctctgagct attccagaag tagtgaggag gctttttgg 3480
aggcctaggc ttttgcaaaa agctcccggg agcttgtata tccattttcg gatctgatca 3540
agagacagga tgaggatcgt ttcgcatgat tgaacaagat ggattgcacg caggttctcc 3600
ggccgcttgg gtggagaggc tattcggcta tgactgggca caacagacaa tcggctgctc 3660
tgatgccgcc gtgttccggc tgtcagcgca ggggcgcccg gttcttttg tcaagaccga 3720
cctgtccggt gccctgaatg aactgcagga cgaggcagcg cggctatcgt ggctggccac 3780
gacgggcgtt ccttgcgcag ctgtgctcga cgttgtcact gaagcgggaa gggactggct 3840
gctattgggc gaagtgccgg ggcaggatct cctgtcatct caccttgctc ctgccgagaa 3900
agtatccatc atggctgatg caatgcggcg gctgcatacg cttgatccgg ctacctgccc 3960
attcgaccac caagcgaaac atcgcatcga gcgagcacgt actcggatgg aagccggtct 4020
tgtcgatcag gatgatctgg acgaagagca tcaggggctc gcgccagccg aactgttcgc 4080
caggctcaag gcgcgcatgc ccgacggcga ggatctcgtc gtgacccatg gcgatgcctg 4140
cttgccgaat atcatggtgg aaaatggccg cttttctgga ttcatcgact gtggccggct 4200
gggtgtggcg gaccgctatc aggacatagc gttggctacc cgtgatattg ctgaagagct 4260
tggcggcgaa tgggctgacc gcttcctcgt gctttacggt atcgccgctc ccgattcgca 4320
gcgcatcgcc ttctatcgcc ttcttgacga gttcttctga gcgggactct ggggttcgaa 4380
atgaccgacc aagcgacgcc caacctgcca tcacgagatt tcgattccac cgccgccttc 4440
tatgaaaggt tgggcttcgg aatcgttttc cgggacgccg gctggatgat cctccagcgc 4500
ggggatctca tgctggagtt cttcgcccac cccaacttgt ttattgcagc ttataatggt 4560
tacaaataaa gcaatagcat cacaaatttc acaaataaag catttttttc actgcattct 4620

agttgtggtt tgtccaaact catcaatgta tcttatcatg tctgtatacc gtcgacctct 4680
agctagagct tggcgtaatc atggtcatag ctgtttcctg tgtgaaattg ttatccgctc 4740
acaattccac acaacatacg agccggaagc ataaagtgta aagcctgggg tgcctaatga 4800
gtgagctaac tcacattaat tgcgttgcgc tcactgcccg ctttccagtc gggaaacctg 4860
tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga gaggcggttt gcggcgagcg 4920
gtatcagctc actcaaaggc ggtaatacgg ttatccacag aatcagggga taacgcagga 4980
aagaacatgt gagcaaaagg ccagcaaaag gccaggaacc gtaaaaaggc cgcgttgctg 5040
gcgtttttcc ataggctccg cccccctgac gagcatcaca aaaatcgacg ctcaagtcag 5100
aggtggcgaa acccgacagg actataaaga taccaggcgt ttccccctgg aagctccctc 5160
gtgcgctctc ctgttccgac cctgccgctt accggatacc tgtccgcctt tctcccttcg 5220
ggaagcgtgg cgctttctca atgctcacgc tgtaggtatc tcagttcggt gtaggtcgtt 5280
cgctccaagc tgggctgtgt gcacgaaccc cccgttcagc ccgaccgctg cgccttatcc 5340
ggtaactatc gtcttgagtc caacccggta agacacgact tatcgccact ggcagcagcc 5400
actggtaaca ggattagcag agcgaggtat gtaggcggtg ctacagagtt cttgaagtgg 5460
tggcctaact acggctacac tagaaggaca gtatttggta tctgcgctct gctgaagcca 5520
gttaccttcg gaaaaagagt tggtagctct tgatccggca aacaaaccac cgctggtagc 5580
ggtggttttt ttgtttgcaa gcagcagatt acgcgcagaa aaaaaggatc tcaagaagat 5640
cctttgatct tttctacggg gtctgacgct cagtggaacg aaaactcacg ttaagggatt 5700
ttggtcatga gattatcaaa aaggatcttc acctagatcc ttttaaatta aaaatgaagt 5760
tttaaatcaa tctaaagtat atatgagtaa acttggtctg acagttacca atgcttaatc 5820
agtgaggcac ctatctcagc gatctgtcta tttcgttcat ccatagttgc ctgactcccc 5880
gtcgtgtaga taactacgat acgggagggc ttaccatctg gccccagtgc tgcaatgata 5940
ccgcgagacc cacgctcacc ggctccagat ttatcagcaa taaaccagcc agccggaagg 6000
gccgagcgca gaagtggtcc tgcaacttta tccgcctcca tccagtctat taattgttgc 6060
cgggaagcta gagtaagtag ttcgccagtt aatagtttgc gcaacgttgt tgccattgct 6120
acaggcatcg tggtgtcacg ctcgtcgttt ggtatggctt cattcagctc cggttcccaa 6180
cgatcaaggc gagttacatg atcccccatg ttgtgcaaaa aagcggttag ctccttcggt 6240
cctccgatcg ttgtcagaag taagttggcc gcagtgttat cactcatggt tatggcagca 6300
ctgcataatt ctcttactgt catgccatcc gtaagatgct tttctgtgac tggtgagtac 6360
tcaaccaagt cattctgaga atagtgtatg cggcgaccga gttgctcttg cccggcgtca 6420
atacgggata ataccgcgcc acatagcaga actttaaaag tgctcatcat tggaaaacgt 6480
tcttcggggc gaaaactctc aaggatctta ccgctgttga gatccagttc gatgtaaccc 6540
actcgtgcac ccaactgatc ttcagcatct tttactttca ccagcgtttc tgggtgagca 6600
aaaacaggaa ggcaaaatgc cgcaaaaaag ggaataaggg cgacacggaa atgttgaata 6660
ctcatactct tcctttttca atattattga agcatttatc agggttattg tctcatgagc 6720
ggatacatat ttgaatgtat ttagaaaaat aaacaaatag gggttccgcg cacatttccc 6780
cgaaaagtgc cacctgacgt c 6801

<210> 14
<211> 6695
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
LBDBSG400V

<400> 14
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020


```
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtg accgaagagg agggagaatg ttgaaacaca agcgccagag agatgatggg 1320
gagggcaggg gtgaagtggg gtctgctgga gacatgagag ctgccaacct ttggccaagc 1380
ccgctcatga tcaaacgctc taagaagaac agcctggcct tgtccctgac ggccgaccag 1440
atggtcagtg ccttgttgga tgctgagccc cccatactct attccgagta tgatcctacc 1500
agacccttca gtgaagcttc gatgatgggc ttactgacca acctggcaga cagggagctg 1560
gttcacatga tcaactgggc gaagagggtg ccaggctttg tggatttgac cctccatgat 1620
caggtccacc ttctagaatg tgcctggcta gagatcctga tgattggtct cgtctggcgc 1680
tccatggagc acccagtgaa gctactgttt gctcctaact tgctcttgga caggaaccag 1740
ggaaaatgtg tagagggcat ggtggagatc ttcgacatgc tgctggctac atcatctcgg 1800
ttccgcatga tgaatctgca gggagaggag tttgtgtgcc tcaaatctat tattttgctt 1860
aattctggag tgtacacatt tctgtccagc accctgaagt ctctggaaga gaaggaccat 1920
atccaccgag tcctggacaa gatcacagac actttgatcc acctgatggc caaggcaggc 1980
ctgaccctgc agcagcagca ccagcggctg gcccagctcc tcctcatcct ctcccacatc 2040
aggcacatga gtaacaaagg catggagcat ctgtacagca tgaagtgcaa gaacgtggtg 2100
cccctctatg acctgctgct ggagatgctg gacgcccacc gcctacatgc gcccactagc 2160
cgtacgccgg ccgacgccct ggacgacttc gacctggaca tgctgccggc cgacgccctg 2220
gacgacttcg acctggacat gctgccggcc gacgccctgg acgacttcga cctggacatg 2280
ctgccggggt aactaagtaa gcggccgctc gagtctagag ggcccgttta aacccgctga 2340
tcagcctcga ctgtgccttc tagttgccag ccatctgttg tttgcccctc ccccgtgcct 2400
tccttgaccc tggaaggtgc cactcccact gtcctttcct aataaaatga ggaaattgca 2460
tcgcattgtc tgagtaggtg tcattctatt ctgggggggtg gggtggggca ggacagcaag 2520
ggggaggatt gggaagacaa tagcaggcat gctggggatg cggtgggctc tatggcttct 2580
gaggcggaaa gaaccagctg gggctctagg gggtatcccc acgcgccctg tagcggcgca 2640
ttaagcgcgg cgggtgtggt ggttacgcgc agcgtgaccg ctacacttgc cagcgcccta 2700
gcgcccgctc ctttcgcttt cttcccttcc tttctcgcca cgttcgccgg ctttccccgt 2760
caagctctaa atcggggcat ccctttaggg ttccgattta gtgctttacg gcacctcgac 2820
cccaaaaaac ttgattaggg tgatggttca cgtagtgggc catcgccctg atagacggtt 2880
tttcgccctt tgacgttgga gtccacgttc tttaatagtg gactcttgtt ccaaactgga 2940
acaacactca accctatctc ggtctattct tttgatttat aagggatttt ggggatttcg 3000
gcctattggt taaaaaatga gctgatttaa caaaaattta acgcgaatta attctgtgga 3060
atgtgtgtca gttagggtgt ggaaagtccc caggctcccc aggcaggcag aagtatgcaa 3120
agcatgcatc tcaattagtc agcaaccagg tgtggaaagt ccccaggctc cccagcaggc 3180
agaagtatgc aaagcatgca tctcaattag tcagcaacca tagtcccgcc cctaactccg 3240
cccatcccgc ccctaactcc gcccagttcc gcccattctc cgccccatgg ctgactaatt 3300
ttttttattt atgcagaggc cgaggccgcc tctgcctctg agctattcca gaagtagtga 3360
ggaggctttt ttggaggcct aggcttttgc aaaaagctcc cgggagcttg tatatccatt 3420
ttcggatctg atcaagagac aggatgagga tcgtttcgca tgattgaaca agatggattg 3480
cacgcaggtt ctccggccgc ttgggtggag aggctattcg gctatgactg ggcacaacag 3540
acaatcggct gctctgatgc cgccgtgttc cggctgtcag cgcaggggcg cccggttctt 3600
tttgtcaaga ccgacctgtc cggtgccctg aatgaactgc aggacgaggc agcgcggcta 3660
tcgtggctgg ccacgacggg cgttccttgc gcagctgtgc tcgacgttgt cactgaagcg 3720
ggaagggact ggctgctatt gggcgaagtg ccggggcagg atctcctgtc atctcacctt 3780
gctcctgccg agaaagtatc catcatggct gatgcaatgc ggcggctgca tacgcttgat 3840
ccggctacct gcccattcga ccaccaagcg aaacatcgca tcgagcgagc acgtactcgg 3900
atggaagccg gtcttgtcga tcaggatgat ctggacgaag agcatcaggg gctcgcgcca 3960
gccgaactgt tcgccaggct caaggcgcgc atgcccgacg gcgaggatct cgtcgtgacc 4020
catggcgatg cctgcttgcc gaatatcatg gtggaaaatg gccgcttttc tggattcatc 4080
gactgtggcc ggctgggtgt ggcggaccgc tatcaggaca tagcgttggc tacccgtgat 4140
attgctgaag agcttggcgg cgaatgggct gaccgcttcc tcgtgcttta cggtatcgcc 4200
gctcccgatt cgcagcgcat cgccttctat cgccttcttg acgagttctt ctgagcggga 4260
ctctggggtt cgaaatgacc gaccaagcga cgcccaacct gccatcacga gatttcgatt 4320
ccaccgccgc cttctatgaa aggttgggct tcggaatcgt tttccgggac gccggctgga 4380
tgatcctcca gcgcggggat ctcatgctgg agttcttcgc ccaccccaac ttgtttattg 4440
cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 4500
tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgta 4560
taccgtcgac ctctagctag agcttggcgt aatcatggtc atagctgttt cctgtgtgaa 4620
attgttatcc gctcacaatt ccacacaaca tacgagccgg aagcataaag tgtaaagcct 4680
ggggtgccta atgagtgagc taactcacat taattgcgtt gcgctcactg cccgctttcc 4740
agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg 4800
gtttgcggcg agcggtatca gctcactcaa aggcggtaat acggttatcc acagaatcag 4860
gggataacgc aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa 4920
aggccgcgtt gctggcgttt ttccataggc tccgcccccc tgacgagcat cacaaaaatc 4980
gacgctcaag tcagaggtgg cgaaacccga caggactata aagataccag gcgtttcccc 5040
```

ctggaagctc cctcgtgcgc tctcctgttc cgaccctgcc gcttaccgga tacctgtccg 5100
cctttctccc ttcgggaagc gtggcgcttt ctcaatgctc acgctgtagg tatctcagtt 5160
cggtgtaggt cgttcgctcc aagctgggct gtgtgcacga acccccccgtt cagcccgacc 5220
gctgcgcctt atccggtaac tatcgtcttg agtccaaccc ggtaagacac gacttatcgc 5280
cactggcagc agccactggt aacaggatta gcagagcgag gtatgtaggc ggtgctacag 5340
agttcttgaa gtggtggcct aactacggct acactagaag gacagtattt ggtatctgcg 5400
ctctgctgaa gccagttacc ttcggaaaaa gagttggtag ctcttgatcc ggcaaacaaa 5460
ccaccgctgg tagcggtggt ttttttgttt gcaagcagca gattacgcgc agaaaaaaag 5520
gatctcaaga agatcctttg atcttttcta cggggtctga cgctcagtgg aacgaaaact 5580
cacgttaagg gattttggtc atgagattat caaaaaggat cttcacctag atccttttaa 5640
attaaaaatg aagttttaaa tcaatctaaa gtatatatga gtaaacttgg tctgacagtt 5700
accaatgctt aatcagtgag gcacctatct cagcgatctg tctatttcgt tcatccatag 5760
ttgcctgact ccccgtcgtg tagataacta cgatacggga gggcttacca tctggcccca 5820
gtgctgcaat gataccgcga gacccacgct caccggctcc agatttatca gcaataaacc 5880
agccagccgg aagggccgag cgcagaagtg gtcctgcaac tttatccgcc tccatccagt 5940
ctattaattg ttgccgggaa gctagagtaa gtagttcgcc agttaatagt ttgcgcaacg 6000
ttgttgccat tgctacaggc atcgtggtgt cacgctcgtc gtttggtatg gcttcattca 6060
gctccggttc ccaacgatca aggcgagtta catgatcccc catgttgtgc aaaaaagcgg 6120
ttagctcctt cggtcctccg atcgttgtca gaagtaagtt ggccgcagtg ttatcactca 6180
tggttatggc agcactgcat aattctctta ctgtcatgcc atccgtaaga tgcttttctg 6240
tgactggtga gtactcaacc aagtcattct gagaatagtg tatgcggcga ccgagttgct 6300
cttgcccggc gtcaatacgg gataataccg cgccacatag cagaacttta aaagtgctca 6360
tcattggaaa acgttcttcg gggcgaaaac tctcaaggat cttaccgctg ttgagatcca 6420
gttcgatgta acccactcgt gcacccaact gatcttcagc atcttttact ttcaccagcg 6480
tttctgggtg agcaaaaaca ggaaggcaaa atgccgcaaa aaagggaata agggcgacac 6540
ggaaatgttg aatactcata ctcttccttt ttcaatatta ttgaagcatt tatcagggtt 6600
attgtctcat gagcggatac atatttgaat gtatttagaa aaataaacaa atagggggttc 6660
cgcgcacatt tccccgaaaa gtgccacctg acgtc 6695

<210> 15
<211> 6695
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
LBDBSG521R

<400> 15
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag ccttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtg accgaagagg agggagaatg ttgaaacaca agcgccagag agatgatggg 1320
gagggcaggg gtgaagtggg gtctgctgga gacatgagag ctgccaacct ttggccaagc 1380
ccgctcatga tcaaacgctc taagaagaac agcctggcct tgtccctgac ggccgaccag 1440
atggtcagtg ccttgttgga tgctgagccc cccatactct attccgagta tgatcctacc 1500
agacccttca gtgaagcttc gatgatgggc ttactgacca acctggcaga cagggagctg 1560

gttcacatga tcaactgggc gaagagggtg ccaggctttg tggatttgac cctccatgat 1620
caggtccacc ttctagaatg tgcctggcta gagatcctga tgattggtct cgtctggcgc 1680
tccatggagc acccagggaa gctactgttt gctcctaact tgctcttgga caggaaccag 1740
ggaaaatgtg tagagggcat ggtggagatc ttcgacatgc tgctggctac atcatctcgg 1800
ttccgcatga tgaatctgca gggagaggag tttgtgtgcc tcaaatctat tattttgctt 1860
aattctggag tgtacacatt tctgtccagc accctgaagt ctctggaaga gaaggaccat 1920
atccaccgag tcctggacaa gatcacagac actttgatcc acctgatggc caaggcaggc 1980
ctgaccctgc agcagcagca ccagcggctg gcccagctcc tcctcatcct ctcccacatc 2040
aggcacatga gtaacaaacg catggagcat ctgtacagca tgaagtgcaa gaacgtggtg 2100
cccctctatg acctgctgct ggagatgctg gacgcccacc gcctacatgc gcccactagc 2160
cgtacgccgg ccgacgccct ggacgacttc gacctggaca tgctgccggc cgacgccctg 2220
gacgacttcg acctggacat gctgccggcc gacgccctgg acgacttcga cctggacatg 2280
ctgccggggt aactaagtaa gcggccgctc gagtctagag ggcccgttta aacccgctga 2340
tcagcctcga ctgtgccttc tagttgccag ccatctgttg tttgcccctc ccccgtgcct 2400
tccttgaccc tggaaggtgc cactcccact gtcctttcct aataaaatga ggaaattgca 2460
tcgcattgtc tgagtaggtg tcattctatt ctggggggtg gggtggggca ggacagcaag 2520
ggggaggatt gggaagacaa tagcaggcat gctggggatg cggtgggctc tatggcttct 2580
gaggcggaaa gaaccagctg gggctctagg gggtatcccc acgcgccctg tagcggcgca 2640
ttaagcgcgg cgggtgtggt ggttacgcgc agcgtgaccg ctacacttgc cagcgcccta 2700
gcgcccgctc ctttcgcttt cttcccttcc tttctcgcca cgttcgccgg ctttccccgt 2760
caagctctaa atcgggcat ccctttaggg ttccgattta gtgctttacg gcacctcgac 2820
cccaaaaaac ttgattaggg tgatggttca cgtagtgggc catcgccctg atagacggtt 2880
tttcgccctt tgacgttgga gtccacgttc tttaatagtg gactcttgtt ccaaactgga 2940
acaacactca accctatctc ggtctattct tttgatttat aagggatttt ggggatttcg 3000
gcctattggt taaaaaatga gctgatttaa caaaaattta acgcgaatta attctgtgga 3060
atgtgtgtca gttagggtgt ggaaagtccc caggctcccc aggcaggcag aagtatgcaa 3120
agcatgcatc tcaattagtc agcaaccagg tgtggaaagt ccccaggctc cccagcaggc 3180
agaagtatgc aaagcatgca tctcaattag tcagcaacca tagtcccgcc cctaactccg 3240
cccatcccgc ccctaactcc gcccagttcc gcccattctc cgccccatgg ctgactaatt 3300
ttttttattt atgcagaggc cgaggccgcc tctgcctctg agctattcca gaagtagtga 3360
ggaggctttt ttggaggcct aggcttttgc aaaaagctcc cgggagcttg tatatccatt 3420
ttcggatctg atcaagagac aggatgagga tcgtttcgca tgattgaaca agatggattg 3480
cacgcaggtt ctccggccgc ttgggtggag aggctattcg gctatgactg ggcacaacag 3540
acaatcggct gctctgatgc cgccgtgttc cggctgtcag cgcaggggcg cccggttctt 3600
tttgtcaaga ccgacctgtc cggtgccctg aatgaactgc aggacgaggc agcgcggcta 3660
tcgtggctgg ccacgacggg cgttccttgc gcagctgtgc tcgacgttgt cactgaagcg 3720
ggaagggact ggctgctatt gggcgaagtg ccggggcagg atctcctgtc atctcacctt 3780
gctcctgccg agaaagtatc catcatggct gatgcaatgc ggcggctgca tacgcttgat 3840
ccggctacct gcccattcga ccaccaagcg aaacatcgca tcgagcgagc acgtactcgg 3900
atggaagccg gtcttgtcga tcaggatgat ctggacgaag agcatcaggg gctcgcgcca 3960
gccgaactgt tcgccaggct caaggcgcgc atgcccgacg gcgaggatct cgtcgtgacc 4020
catggcgatg cctgcttgcc gaatatcatg gtggaaaatg gccgcttttc tggattcatc 4080
gactgtggcc ggctgggtgt ggcggaccgc tatcaggaca tagcgttggc tacccgtgat 4140
attgctgaag agcttggcgg cgaatgggct gaccgcttcc tcgtgcttta cggtatcgcc 4200
gctcccgatt cgcagcgcat cgccttctat cgccttcttg acgagttctt ctgagcggga 4260
ctctggggtt cgaaatgacc gaccaagcga cgcccaacct gccatcacga gatttcgatt 4320
ccaccgccgc cttctatgaa aggttgggct tcggaatcgt tttccgggac gccggctgga 4380
tgatcctcca gcgcggggat ctcatgctgg agttcttcgc ccaccccaac ttgtttattg 4440
cagcttataa tggttacaaa taaagcaata gcatcacaaa tttcacaaat aaagcatttt 4500
tttcactgca ttctagttgt ggtttgtcca aactcatcaa tgtatcttat catgtctgta 4560
taccgtcgac ctctagctag agcttggcgt aatcatggtc atagctgttt cctgtgtgaa 4620
attgttatcc gctcacaatt ccacacaaca tacgagccgg aagcataaag tgtaaagcct 4680
ggggtgccta atgagtgagc taactcacat taattgcgtt gcgctcactg cccgctttcc 4740
agtcgggaaa cctgtcgtgc cagctgcatt aatgaatcgg ccaacgcgcg gggagaggcg 4800
gtttgcggcg agcggtatca gctcactcaa aggcggtaat acggttatcc acagaatcag 4860
gggataacgc aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa 4920
aggccgcgtt gctggcgttt ttccataggc tccgcccccc tgacgagcat cacaaaaatc 4980
gacgctcaag tcagaggtgg cgaaacccga caggactata aagataccag gcgtttcccc 5040
ctggaagctc cctcgtgcgc tctcctgttc cgaccctgcc gcttaccgga tacctgtccg 5100
cctttctccc ttcgggaagc gtggcgcttt ctcaatgctc acgctgtagg tatctcagtt 5160
cggtgtaggt cgttcgctcc aagctgggct gtgtgcacga accccccgtt cagcccgacc 5220
gctgcgcctt atccggtaac tatcgtcttg agtccaaccc ggtaagacac gacttatcgc 5280
cactggcagc agccactggt aacaggatta gcagagcgag gtatgtaggc ggtgctacag 5340
agttcttgaa gtggtggcct aactacggct acactagaag gacagtattt ggtatctgcg 5400
ctctgctgaa gccagttacc ttcggaaaaa gagttggtag ctcttgatcc ggcaaacaaa 5460
ccaccgctgg tagcggtggt ttttttgttt gcaagcagca gattacgcgc agaaaaaaag 5520
gatctcaaga agatcctttg atcttttcta cggggtctga cgctcagtgg aacgaaaact 5580

cacgttaagg gattttggtc atgagattat caaaaaggat cttcacctag atccttttaa 5640
attaaaaatg aagttttaaa tcaatctaaa gtatatatga gtaaacttgg tctgacagtt 5700
accaatgctt aatcagtgag gcacctatct cagcgatctg tctatttcgt tcatccatag 5760
ttgcctgact ccccgtcgtg tagataacta cgatacggga gggcttacca tctggcccca 5820
gtgctgcaat gataccgcga gacccacgct caccggctcc agatttatca gcaataaacc 5880
agccagccgg aagggccgag cgcagaagtg gtcctgcaac tttatccgcc tccatccagt 5940
ctattaattg ttgccgggaa gctagagtaa gtagttcgcc agttaatagt ttgcgcaacg 6000
ttgttgccat tgctacaggc atcgtggtgt cacgctcgtc gtttggtatg gcttcattca 6060
gctccggttc ccaacgatca aggcgagtta catgatcccc catgttgtgc aaaaaagcgg 6120
ttagctcctt cggtcctccg atcgttgtca gaagtaagtt ggccgcagtg ttatcactca 6180
tggttatggc agcactgcat aattctctta ctgtcatgcc atccgtaaga tgcttttctg 6240
tgactggtga gtactcaacc aagtcattct gagaatagtg tatgcggcga ccgagttgct 6300
cttgcccggc gtcaatacgg gataataccg cgccacatag cagaacttta aaagtgctca 6360
tcattggaaa acgttcttcg gggcgaaaac tctcaaggat cttaccgctg ttgagatcca 6420
gttcgatgta acccactcgt gcacccaact gatcttcagc atcttttact ttcaccagcg 6480
tttctgggtg agcaaaaaca ggaaggcaaa atgccgcaaa aaagggaata agggcgacac 6540
ggaaatgttg aatactcata ctcttccttt ttcaatatta ttgaagcatt tatcagggtt 6600
attgtctcat gagcggatac atatttgaat gtatttagaa aaataaacaa ataggggttc 6660
cgcgcacatt tccccgaaaa gtgccacctg acgtc 6695

<210> 16
<211> 6801
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
LBDBSVP16

<400> 16
gacggatcgg gagatctccc gatcccctat ggtcgactct cagtacaatc tgctctgatg 60
ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
gattattgac tagttattaa tagtaatcaa ttacggggtc attagttcat agcccatata 300
tggagttccg cgttacataa cttacggtaa atggcccgcc tggctgaccg cccaacgacc 360
cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
attgacgtca atgggtggac tatttacggt aaactgccca cttggcagta catcaagtgt 480
atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
actcacgggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
aaaatcaacg ggactttcca aaatgtcgta acaactccgc cccattgacg caaatgggcg 780
gtaggcgtgt acggtgggag gtctatataa gcagagctct ctggctaact agagaaccca 840
ctgcttactg gcttatcgaa attaatacga ctcactatag ggagacccaa gctggctagc 900
gtttaaactt aagcttggta ccgagctcgg atccactagt ccagtgtggt ggaattcctg 960
cagcccgggg gatctatggc ccaggcggcc ctcgagccct atgcttgccc tgtcgagtcc 1020
tgcgatcgcc gcttttctaa gtcggctgat ctgaagcgcc atatccgcat ccacacaggc 1080
cagaagcctt tccagtgtcg aatatgcatg cgtaacttca gtcgtagtga ccaccttacc 1140
acccacatcc gcacccacac aggcgagaag cctttttgcct gtgacatttg tgggaggaag 1200
tttgccagga gtgatgaacg caagaggcat accaaaatcc atttaagaca gagggactct 1260
agaactagtg accgaagagg agggagaatg ttgaaacaca agcgccagag agatgatggg 1320
gagggcaggg gtgaagtggg gtctgctgga gacatgagag ctgccaacct ttggccaagc 1380
ccgctcatga tcaaacgctc taagaagaac agcctggcct tgtccctgac ggccgaccag 1440
atggtcagtg ccttgttgga tgctgagccc cccatactct attccgagta tgatcctacc 1500
agacccttca gtgaagcttc gatgatgggc ttactgacca acctggcaga cagggagctg 1560
gttcacatga tcaactgggc gaagagggtg ccaggctttg tggatttgac cctccatgat 1620
caggtccacc ttctagaatg tgcctggcta gagatcctga tgattggtct cgtctggcgc 1680
tccatggagc acccagggaa gctactgttt gctcctaact tgctcttgga caggaaccag 1740
ggaaaatgtg tagagggcat ggtggagatc ttcgacatgc tgctggctac atcatctcgg 1800
ttccgcatga tgaatctgca gggagaggag tttgtgtgcc tcaaatctat tattttgctt 1860
aattctggag tgtacacatt tctgtccagc accctgaagt ctctggaaga gaaggaccat 1920
atccaccgag tcctggacaa gatcacagac actttgatcc acctgatggc caaggcaggc 1980
ctgaccctgc agcagcagca ccagcggctg gcccagctcc tcctcatcct ctcccacatc 2040
aggcacatga gtaacaaagg catggagcat ctgtacagca tgaagtgcaa gaacgtggtg 2100

```
ccccctctatg acctgctgct ggagatgctg gacgcccacc gcctacatgc gcccactagc 2160
cgtacgggcg ctccccccgac cgatgtcagc ctgggggacg agctccactt agacggcgag 2220
gacgtggcga tggcgcatgc cgacgcgcta gacgatttcg atctggacat gttgggggac 2280
ggggattccc cgggtccggg atttaccccc cacgactccg ccccctacgg cgctctggat 2340
atggccgact tcgagtttga gcagatgttt accgatgccc ttggaattga cgagtacggt 2400
tagggggcgg ccgctcgagt ctagagggcc cgtttaaacc cgctgatcag cctcgactgt 2460
gccttctagt tgccagccat ctgttgtttg cccctccccc gtgccttcct tgaccctgga 2520
aggtgccact cccactgtcc tttcctaata aaatgaggaa attgcatcgc attgtctgag 2580
taggtgtcat tctattctgg ggggtggggt ggggcaggac agcaaggggg aggattggga 2640
agacaatagc aggcatgctg gggatgcggt gggctctatg gcttctgagg cggaaagaac 2700
cagctggggc tctagggggt atccccacgc gccctgtagc ggcgcattaa gcgcggcggg 2760
tgtggtggtt acgcgcagcg tgaccgctac acttgccagc gccctagcgc ccgctccttt 2820
cgctttcttc ccttcctttc tcgccacgtt cgccggcttt ccccgtcaag ctctaaatcg 2880
gggcatccct ttagggttcc gatttagtgc tttacggcac ctcgacccca aaaaacttga 2940
ttagggtgat ggttcacgta gtgggccatc gccctgatag acggtttttc gccctttgac 3000
gttggagtcc acgttcttta atagtggact cttgttccaa actggaacaa cactcaaccc 3060
tatctcggtc tattcttttg atttataagg gattttgggg atttcggcct attggttaaa 3120
aaatgagctg atttaacaaa aatttaacgc gaattaattc tgtggaatgt gtgtcagtta 3180
gggtgtggaa agtccccagg ctccccaggc aggcagaagt atgcaaagca tgcatctcaa 3240
ttagtcagca accaggtgtg gaaagtcccc aggctcccca gcaggcagaa gtatgcaaag 3300
catgcatctc aattagtcag caaccatagt cccgccccta actccgccca tcccgcccct 3360
aactccgccc agttccgccc attctccgcc ccatggctga ctaatttttt ttatttatgc 3420
agaggccgag gccgcctctg cctctgagct attccagaag tagtgaggag gcttttttgg 3480
aggcctaggc ttttgcaaaa agctcccggg agcttgtata tccattttcg gatctgatca 3540
agagacagga tgaggatcgt ttcgcatgat tgaacaagat ggattgcacg caggttctcc 3600
ggccgcttgg gtggagaggc tattcggcta tgactgggca caacagacaa tcggctgctc 3660
tgatgccgcc gtgttccggc tgtcagcgca ggggcgcccg gttctttttg tcaagaccga 3720
cctgtccggt gccctgaatg aactgcagga cgaggcagcg cggctatcgt ggctggccac 3780
gacgggcgtt ccttgcgcag ctgtgctcga cgttgtcact gaagcgggaa gggactggct 3840
gctattgggc gaagtgccgg ggcaggatct cctgtcatct caccttgctc ctgccgagaa 3900
agtatccatc atggctgatg caatgcggcg gctgcatacg cttgatccgg ctacctgccc 3960
attcgaccac caagcgaaac atcgcatcga gcgagcacgt actcggatgg aagccggtct 4020
tgtcgatcag gatgatctgg acgaagagca tcaggggctc gcgccagccg aactgttcgc 4080
caggctcaag gcgcgcatgc ccgacggcga ggatctcgtc gtgacccatg gcgatgcctg 4140
cttgccgaat atcatggtgg aaaatggccg cttttctgga ttcatcgact gtggccggct 4200
gggtgtggcg gaccgctatc aggacatagc gttggctacc cgtgatattg ctgaagagct 4260
tggcggcgaa tgggctgacc gcttcctcgt gctttacggt atcgccgctc ccgattcgca 4320
gcgcatcgcc ttctatcgcc ttcttgacga gttcttctga gcgggactct ggggttcgaa 4380
atgaccgacc aagcgacgcc caacctgcca tcacgagatt tcgattccac cgccgccttc 4440
tatgaaaggt tgggcttcgg aatcgttttc cgggacgccg gctggatgat cctccagcgc 4500
ggggatctca tgctggagtt cttcgcccac cccaacttgt ttattgcagc ttataatggt 4560
tacaaataaa gcaatagcat cacaaatttc acaaataaag catttttttc actgcattct 4620
agttgtggtt tgtccaaact catcaatgta tcttatcatg tctgtatacc gtcgacctct 4680
agctagagct tggcgtaatc atggtcatag ctgtttcctg tgtgaaattg ttatccgctc 4740
acaattccac acaacatacg agccggaagc ataaagtgta aagcctgggg tgcctaatga 4800
gtgagctaac tcacattaat tgcgttgcgc tcactgcccg ctttccagtc gggaaacctg 4860
tcgtgccagc tgcattaatg aatcggccaa cgcgcgggga gaggcggttt gcggcgagcg 4920
gtatcagctc actcaaaggc ggtaatacgg ttatccacag aatcagggga taacgcagga 4980
aagaacatgt gagcaaaagg ccagcaaaag gccaggaacc gtaaaaaggc cgcgttgctg 5040
gcgtttttcc ataggctccg cccccctgac gagcatcaca aaaatcgacg ctcaagtcag 5100
aggtggcgaa acccgacagg actataaaga taccaggcgt ttccccctgg aagctccctc 5160
gtgcgctctc ctgttccgac cctgccgctt accggatacc tgtccgcctt tctcccttcg 5220
ggaagcgtgg cgctttctca atgctcacgc tgtaggtatc tcagttcggt gtaggtcgtt 5280
cgctccaagc tgggctgtgt gcacgaaccc cccgttcagc ccgaccgctg cgccttatcc 5340
ggtaactatc gtcttgagtc caacccggta agacacgact tatcgccact ggcagcagcc 5400
actggtaaca ggattagcag agcgaggtat gtaggcggtg ctacagagtt cttgaagtgg 5460
tggcctaact acggctacac tagaaggaca gtatttggta tctgcgctct gctgaagcca 5520
gttaccttcg gaaaaagagt tggtagctct tgatccggca aacaaaccac cgctggtagc 5580
ggtggttttt ttgtttgcaa gcagcagatt acgcgcagaa aaaaaggatc tcaagaagat 5640
cctttgatct tttctacggg gtctgacgct cagtggaacg aaaactcacg ttaagggatt 5700
ttggtcatga gattatcaaa aaggatcttc acctagatcc ttttaaatta aaaatgaagt 5760
tttaaatcaa tctaaagtat atatgagtaa acttggtctg acagttacca atgcttaatc 5820
agtgaggcac ctatctcagc gatctgtcta tttcgttcat ccatagttgc ctgactcccc 5880
gtcgtgtaga taactacgat acgggagggc ttaccatctg gccccagtgc tgcaatgata 5940
ccgcgagacc cacgctcacc ggctccagat ttatcagcaa taaaccagcc agccggaagg 6000
gccgagcgca gaagtggtcc tgcaacttta tccgcctcca tccagtctat taattgttgc 6060
cgggaagcta gagtaagtag ttcgccagtt aatagtttgc gcaacgttgt tgccattgct 6120
```

acaggcatcg tggtgtcacg ctcgtcgttt ggtatggctt cattcagctc cggttcccaa 6180
cgatcaaggc gagttacatg atcccccatg ttgtgcaaaa aagcggttag ctccttcggt 6240
cctccgatcg ttgtcagaag taagttggcc gcagtgttat cactcatggt tatggcagca 6300
ctgcataatt ctcttactgt catgccatcc gtaagatgct tttctgtgac tggtgagtac 6360
tcaaccaagt cattctgaga atagtgtatg cggcgaccga gttgctcttg cccggcgtca 6420
atacgggata ataccgcgcc acatagcaga actttaaaag tgctcatcat tggaaaacgt 6480
tcttcggggc gaaaactctc aaggatctta ccgctgttga gatccagttc gatgtaaccc 6540
actcgtgcac ccaactgatc ttcagcatct tttactttca ccagcgtttc tgggtgagca 6600
aaaacaggaa ggcaaaatgc cgcaaaaaag ggaataaggg cgacacggaa atgttgaata 6660
ctcatactct tcctttttca atattattga agcatttatc agggttattg tctcatgagc 6720
ggatacatat ttgaatgtat ttagaaaaat aaacaaatag gggttccgcg cacatttccc 6780
cgaaaagtgc cacctgacgt c 6801

<210> 17
<211> 1551
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
VP16C7ER

<400> 17
gctagcgcca ccatggggcg cgccggcgct cccccgaccg atgtcagcct gggggacgag 60
ctccacttag acggcgagga cgtggcgatg gcgcatgccg acgcgctaga cgatttcgat 120
ctggacatgt tgggggacgg ggattccccg ggtccgggat ttacccccca cgactccgcc 180
ccctacggcg ctctggatat ggccgacttc gagtttgagc agatgtttac cgatgccctt 240
ggaattgacg agtacggttt aattaacaag cttggggccc aggcggccct cgagccctat 300
gcttgccctg tcgagtcctg cgatcgccgc ttttctaagt cggctgatct gaagcgccat 360
atccgcatcc acacaggcca gaagcccttc cagtgtcgaa tatgcatgcg taacttcagt 420
cgtagtgacc accttaccac ccacatccgc acccacacag gcgagaagcc ttttgcctgt 480
gacatttgtg ggaggaagtt tgccaggagt gatgaacgca agaggcatac caaaatccat 540
ttaagacaga aggactctag aactagtggc caggccggcc aggggggatcc acgaaatgaa 600
atgggtgctt caggagacat gagggctgcc aacctttggc caagccctct tgtgattaag 660
cacactaaga agaatagccc tgccttgtcc ttgacagctg accagatggt cagtgccttg 720
ttggatgctg aaccgcccat gatctattct gaatatgatc cttctagacc cttcagtgaa 780
gcctcaatga tgggcttatt gaccaaccta gcagataggg agctggttca tatgatcaac 840
tgggcaaaga gagtgccagg ctttggggac ttgaatctcc atgatcaggt ccaccttctc 900
gagtgtgcct ggctggagat tctgatgatt ggtctcgtct ggcgctccat ggaacacccg 960
gggaagctcc tgtttgctcc taacttgctc ctggacagga atcaaggtaa atgtgtggaa 1020
ggcatggtgg agatctttga catgttgctt gctacgtcaa gtcggttccg catgatgaac 1080
ctgcagggtg aagagtttgt gtgcctcaaa tccatcattt tgcttaattc cggagtgtac 1140
acgtttctgt ccagcacctt gaagtctctg gaagagaagg accacatcca ccgtgtcctg 1200
gacaagatca cagacacttt gatccacctg atggccaaag ctggcctgac tctgcagcag 1260
cagcatcgcc gcctagctca gctccttctc attctttccc atatccggca catgagtaac 1320
aaaggcatgg agcatctcta caacatgaaa tgcaagaacg ttgtgcccct ctatgacctg 1380
ctcctggaga tgttggatgc ccaccgcctt catgccccag ccagtcgcat gggagtgccc 1440
ccagaggagc ccagccagac ccagctggcc accaccagct ccacttcagc acattcctta 1500
caaacctact acatacccc ggaagcagag ggcttcccca acacgatctg a 1551

<210> 18
<211> 1404
<212> DNA
<213> Artificial Sequence

<220>

<220>
<223> Description of Artificial Sequence: Construct
VP16C7PR

<400> 18
gctagcgcca ccatggggcg cgccggcgct cccccgaccg atgtcagcct gggggacgag 60
ctccacttag acggcgagga cgtggcgatg gcgcatgccg acgcgctaga cgatttcgat 120
ctggacatgt tgggggacgg ggattccccg ggtccgggat ttacccccca cgactccgcc 180

ccctacggcg ctctggatat ggccgacttc gagtttgagc agatgtttac cgatgccctt 240
ggaattgacg agtacggttt aattaacaag cttggggccc aggcggccct cgagccctat 300
gcttgccctg tcgagtcctg cgatcgccgc ttttctaagt cggctgatct gaagcgccat 360
atccgcatcc acacaggcca gaagcccttc cagtgtcgaa tatgcatgcg taacttcagt 420
cgtagtgacc accttaccac ccacatccgc acccacacag gcgagaagcc ttttgcctgt 480
gacatttgtg ggaggaagtt tgccaggagt gatgaacgca agaggcatac caaaatccat 540
ttaagacaga aggactctag aactagtggc caggccggcc aggggatcc agtcagagtt 600
gtgagagcac tggatgctgt tgctctccca cagccagtgg gcgttccaaa tgaaagccaa 660
gccctaagcc agagattcac tttttcacca ggtcaagaca tacagttgat tccaccactg 720
atcaacctgt taatgagcat tgaaccagat gtgatctatg caggacatga caacacaaaa 780
cctgacacct ccagttcttt gctgacaagt cttaatcaac taggcgagag gcaacttctt 840
tcagtagtca agtggtctaa atcattgcca ggttttcgaa acttacatat tgatgaccag 900
ataactctca ttcagtattc ttggatgagc ttaatggtgt ttggtctagg atggagatcc 960
tacaaacacg tcagtgggca gatgctgtat tttgcacctg atctaatact aaatgaacag 1020
cggatgaaag aatcatcatt ctattcatta tgccttacca tgtggcagat cccacaggag 1080
tttgtcaagc ttcaagttag ccaagaagag ttcctctgta tgaaagtatt gttacttctt 1140
aatacaattc ctttggaagg gctacgaagt caaacccagt ttgaggagat gaggtcaagc 1200
tacattagag agctcatcaa ggcaattggt ttgaggcaaa aaggagttgt gtcgagctca 1260
cagcgtttct atcaacttac aaaacttctt gataacttgc atgatcttgt caaacaactt 1320
catctgtact gcttgaatac atttatccag tcccgggcac tgagtgttga atttccagaa 1380
atgatgtctg aagttattgc ttga 1404

<210> 19
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 19
Thr Gly Glu Lys Pro
1 5

<210> 20
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule
<220>

<221> n= $\{N\}_x$; X= any number

<222> 10

<400> 20
ggcccacgcn gcgtgggcg 19

<210> 21
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule
<220>

<221> n= $\{N\}_x$; X= any number

<222> 19

<400> 21
cgccgccgcc gccgccgcng cgtgggcg 28

<210> 22
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 22
Met Lys Leu Leu Glu Pro Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg
1 5 10 15

Arg Phe Ser Lys Ser Ala Asp Leu Lys Arg His Ile Arg His Thr Gly
20 25 30

Glu Lys Pro
35

<210> 23
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 23
Tyr Ala Cys Pro Val Glu Ser Cys Asp Arg Arg Phe Ser Lys Ser Ala
1 5 10 15

Asp Leu Lys His Ile Arg Ile His Thr Gly Glu Lys Pro
20 25

<210> 24
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 24
cctcgccgcc gcgggttttc ccgcgccccc gagg 34

<210> 25
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule
<220>

<221> nnn= a mixture of all 64 existing triplets and its complement

<222> 26-28 and 7-9 respectively

<400> 25
ggacgcnnnc gcgggttttc ccgcgnnngc gtcc 34

<210> 26
<211> 66
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 26
gcgagcaagg tcgcggcagt cactaaaaga tttgccgcac tctgggcatt tatacggttt 60
ttcacc 66

<210> 27
<211> 74
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 27
gtgactgccg cgaccttgct cgccatcaac gcactcatac tggcgagaag ccatacaaat 60
gtccagaatg tggc 74

<210> 28
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 28
ggtaagtcct tctctcagag ctctcacctg gtgcgccacc agcgtaccca cacgggtgaa 60
aaaccgtata aatgcccaga g 81

<210> 29
<211> 58
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 29
acgcaccagc ttgtcagagc ggctgaaaga cttgccacat tctggacatt tgtatggc 58

<210> 30
<211> 87
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 30
gaggaggagg aggtggccca ggcggccctc gagcccgggg agaagcccta tgcttgtccg 60
gaatgtggta agtccttctc tcagagc 87

<210> 31
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 31
gaggaggagg agctggccgg cctggccact agtttttta ccggtgtgag tacgttggtg 60
acgcaccagc ttgtcagagc g 81

<210> 32
<211> 44
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 32
gaggaggagg ctagcgggat gtggtcttgc cctcaacagg tagg 44

<210> 33
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 33
gaggaggaga agcttctcgt ccgcctcccg cggcgctccg c 41

<210> 34
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 34
gaggaggagg ctagccgatg tgactgtctc ctcccaaatt tgtagacc 48

<210> 35
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 35
gaggaggaga agcttggtgc tcactgcggc tccggcccca tg 42

<210> 36
<211> 11
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Recombinant molecule

<400> 36
Asp Ala Leu Asp Asp Phe Asp Leu Asp Met Leu
1 5 10

<210> 37
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 37
gaggagggct gcttgaggaa gta 23

<210> 38
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 38
gccggagcca tggggccgga gcc 23

<210> 39
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 39
cctactgccg gcactagttc tgctggagac atgagagctg ccaacctt 48

<210> 40
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 40
cctaaacgta cggctagtgg gcgcatgtag gcggtgggcg tc 42

<210> 41
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 41
cctaaacgta cggactgtgg cagggaaacc ctctgcctc 39

<210> 42
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 42
ccacttaaat gtgaaagtcg tacgccggcc 30

<210> 43
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 43
tatgggggc tcagcatcca acaaggcact 30

<210> 44
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 44
cctactacta gtgaccgaag aggagggaga atgttgaaac acaagcgc 48

<210> 45
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 45
cctactacta gtagtattca aggacataac gactatatgt gt 42

<210> 46
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 46
tatcatgtgc ggccgcttac ttagttaccc cggcagcat 39

<210> 47
<211> 39
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Recombinant molecule

<400> 47
Pro Ala Asp Ala Leu Asp Asp Phe Asp Leu Asp Met Leu Pro Ala Asp
1 5 10 15

Ala Leu Asp Asp Phe Asp Leu Asp Met Leu Pro Ala Asp Ala Leu Asp
20 25 30

Asp Phe Asp Leu Asp Met Leu
35

<210> 48
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 48
gatccaaagt cgcgtgggcg cagcgcccac gcgatcaaag a 41

<210> 49
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 49
gatccaaagt ccaggcgagc gcgtgggcgg cagatcaaag a 41

<210> 50
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 50
gatccaaagt cgcgtgggcg caggcgcgag cgtgggcgga tcaaaga 47

<210> 51
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 51
gatccaaagt cgcgtgggcg cagcgcccac gcgatcaaag a 41

<210> 52
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 52
gatccaaagt cgcgtgggcg cactccggcc ccgatcaaag a 41

<210> 53
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 53
gatccaaagt cggggccgga gactccggcc ccgatcaaag a 41

<210> 54
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 54
gccggagcca tggggccgga gcc 23

<210> 55
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 55
cgctccctct caggcgcagg g 21

<210> 56
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 56
ggcgcccact gtggggcggg c 21

<210> 57
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 57
gaggaggagg gccggccggg aagccgtgca ggaggagcgg c 41

<210> 58
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 58
gaggaggagg gcgcgcccag tcatttggtg cggcgcctcc agc 43

<210> 59
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 59
gaggaggagt taattaaagt catttggtgc ggcgcctcca gc 42

<210> 60
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 60
gaggaggagg gccggccggg gtggcggcca agactttgtt aagaagg 47

<210> 61
<211> 50
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 61
gaggaggagg gcccaggcgg ccggtggcgg ccaagacttt gttaagaagg 50

<210> 62
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 62
gaggaggagg gcgcgcccgg catgaacgtc ccagatctcc tcgag 45

<210> 63
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant

molecule

<400> 63
gaggaggagg gccggccgga ggcctgaatg tgtcatacag gagccc 46

<210> 64
<211> 49
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 64
gaggaggagg gcccaggcgg ccaggcctga atgtgtcata caggagccc 49

<210> 65
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 65
gaggaggagg gcgcgcccct ccgccacgtc ccagatctcc tcgag 45

<210> 66
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 66
gtacagatgc tccatgcgtt tgttactcat gtgcc 35

<210> 67
<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 67
ggcacatgag taacaaacgc atggagcatc tgtac 35

<210> 68
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 68
ccatggagca cccagtgaag ctactgtttg c 31

<210> 69
<211> 31

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule
<400> 69
gcaaacagta gcttcactgg gtgctccatg g 31

<210> 70
<211> 624
<212> DNA
<213> Muridae

<220>
<221> CDS
<222> (1)...(624)
<223> cDNA encoding secretion signal and murine endostain protein.

<400> 70

```
atg gag aca gac aca ctc ctg cta tgg gta ctg ctg ctc tgg gtt cca   48
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
 1               5                  10                  15

ggt tcc act ggt gac gcg gcc cat act cat cag gac ttt cag cca gtg   96
Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
            20                  25                  30

ctc cac ctg gtg gca ctg aac acc ccc ctg tct gga ggc atg cgt ggt  144
Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
        35                  40                  45

atc cgt gga gca gat ttc cag tgc ttc cag caa gcc cga gcc gtg ggg  192
Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
    50                  55                  60

ctg tcg ggc acc ttc cgg gct ttc ctg tcc tct agg ctg cag gat ctc  240
Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
65                  70                  75                  80

tat agc atc gtg cgc cgt gct gac cgg ggg tct gtg ccc atc gtc aac  288
Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
                85                  90                  95

ctg aag gac gag gtg cta tct ccc agc tgg gac tcc ctg ttt tct ggc  336
Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
            100                 105                 110

tcc cag ggt caa gtg caa ccc ggg gcc cgc atc ttt tct ttt gac ggc  384
Ser Gln Gly Gln Val Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
        115                 120                 125

aga gat gtc ctg aga cac cca gcc tgg ccg cag aag agc gta tgg cac  432
Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
    130                 135                 140

ggc tcg gac ccc agt ggg cgg agg ctg atg gag agt tac tgt gag aca  480
Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
145                 150                 155                 160

tgg cga act gaa act act ggg gct aca ggt cag gcc tcc tcc ctg ctg  528
Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
                165                 170                 175

tca ggc agg ctc ctg gaa cag aaa gct gcg agc tgc cac aac agc tac  576
```

Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
180 185 190

atc gtc ctg tgc att gag aat agc ttc atg acc tct ttc tcc aaa tag 624
Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys *
195 200 205

<210> 71
<211> 207
<212> PRT
<213> Muridae

<400> 71
Met Glu Thr Asp Thr Leu Leu Leu Trp Val Leu Leu Leu Trp Val Pro
1 5 10 15
Gly Ser Thr Gly Asp Ala Ala His Thr His Gln Asp Phe Gln Pro Val
20 25 30
Leu His Leu Val Ala Leu Asn Thr Pro Leu Ser Gly Gly Met Arg Gly
35 40 45
Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala Arg Ala Val Gly
50 55 60
Leu Ser Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg Leu Gln Asp Leu
65 70 75 80
Tyr Ser Ile Val Arg Arg Ala Asp Arg Gly Ser Val Pro Ile Val Asn
85 90 95
Leu Lys Asp Glu Val Leu Ser Pro Ser Trp Asp Ser Leu Phe Ser Gly
100 105 110
Ser Gln Gly Gln Val Gln Pro Gly Ala Arg Ile Phe Ser Phe Asp Gly
115 120 125
Arg Asp Val Leu Arg His Pro Ala Trp Pro Gln Lys Ser Val Trp His
130 135 140
Gly Ser Asp Pro Ser Gly Arg Arg Leu Met Glu Ser Tyr Cys Glu Thr
145 150 155 160
Trp Arg Thr Glu Thr Thr Gly Ala Thr Gly Gln Ala Ser Ser Leu Leu
165 170 175
Ser Gly Arg Leu Leu Glu Gln Lys Ala Ala Ser Cys His Asn Ser Tyr
180 185 190
Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ser Phe Ser Lys
195 200 205

<210> 72
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Integrin β3 (B3B) target sequence

<400> 72
gcctgagagg gagcggtg 18

<210> 73
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Integrin β3 (B3C) target sequence

<400> 73
ggaggggacg cggtgggt 18

<210> 74
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: ErbB-2 (E2B2) target sequence

<400> 74
gtgtgagaac ggctgcaggc 20

<210> 75
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: ErbB-2 (E2C) target sequence

<400> 75
ggggccggag ccgcagtg 18

<210> 76
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: ErbB-2 (E2D) target sequence

<400> 76
gcagttggag ggggcgag 18

<210> 77
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 77
Gln Ser Ser Asn Leu Val Arg
1 5

<210> 78
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 78
Asp Pro Gly Asn Leu Val Arg
1 5

<210> 79
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 79
Arg Ser Asp Asn Leu Val Arg

1 5

<210> 80
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 80
Thr Ser Gly Asn Leu Val Arg
1 5

<210> 81
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 81
Gln Ser Gly Asp Leu Arg Arg
1 5

<210> 82
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 82
Asp Cys Arg Asp Leu Ala Arg
1 5

<210> 83
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 83
Arg Ser Asp Asp Leu Val Lys
1 5

<210> 84
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 84
Thr Ser Gly Glu Leu Val Arg
1 5

<210> 85
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 85
Gln Arg Ala His Leu Glu Arg
1 5

<210> 86
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 86
Asp Pro Gly His Leu Val Arg
1 5

<210> 87
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 87
Arg Ser Asp Lys Leu Val Arg
1 5

<210> 88
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 88
Thr Ser Gly His Leu Val Arg
1 5

<210> 89
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 89
Gln Ser Ser Ser Leu Val Arg
1 5

<210> 90
<211> 7

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 90
Asp Pro Gly Ala Leu Val Arg
1 5

<210> 91
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 91
Arg Ser Asp Glu Leu Val Arg
1 5

<210> 92
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Recombinant molecule

<400> 92
Thr Ser Gly Ser Leu Val Arg
1 5